

**APPENDIX A**  
**CHEMISTRY DATA SUMMARY TABLES**

**Table A-1. Roxana Marsh Conventional Data Results**

Sample ID (in situ depth)	Oil & Grease (%)	TOC (mg/kg)	TOC (%)
FW-RM-01-SS	4.7 N *j	210000	21
FW-RM-01-CS-1-2 (2.1-4.2)	2 j	190000	19
FW-RM-01-CS-2-3.9 (4.2-8.2)	0.21 Uj	120000	12
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	0.22 Uj	120000	12
FW-RM-21-CS-3.6-5.6 (dup)	0.16 Uj	96000	9.6
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	0.12 Uj	55000	5.5
FW-RM-21-CS-7.0-9.0 (dup)	0.12 Uj	57000	5.7
FW-RM-02-SS	3.4 j	240000	24
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	0.4 j	43000	4.3
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	0.11 j	64000	6.4
FW-RM-03-SS	1.2 j	98000	9.8
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	0.078 Uj	58000	5.8
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	0.065 Uj	50000	5.0
FW-RM-04-SS	0.35 j	14000	1.4
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	0.22 j	60000	6.0
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	0.069 Uj	24000	2.4
FW-RM-05-SS	13 j	220000	22
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	3.1 j	230000	23
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	0.1 j	22000	2.2
FW-RM-06-SS	1.8 j	130000	13
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	0.097 Uj	65000	6.5
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	0.074 Uj	8200	0.82
FW-RM-07-SS	2 j	91000	9.1
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	0.11 Uj	87000	8.7
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	0.071 Uj	41000	4.1
FW-RM-08-SS	0.71 j	110000	11
FW-RM-08-CS-1-2.3 (1.2-2.7)	0.15 j	62000	6.2
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	0.075 Uj	39000	3.9
FW-RM-09-SS	2 j	150000	15
FW-RM-09-CS-1-3.5 (1.1-4.0)	0.19 j	76000	7.6
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	0.11 j	31000	3.1
FW-RM-10-SS	1.4 j	85000	8.5
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	0.12 j	110000	11
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	0.075 Uj	33000	3.3
FW-RM-11-SS	0.72 j	170000	17
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	0.13 Uj	120000	12
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	0.087 Uj	53000	5.3
FW-RM-12-SS	4.3 j	220000	22
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	2.5 j	300000	30
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	0.18 j	65000	6.5
FW-RM-13-SS	1.6 j	200000	20
FW-RM-21-SS (dup)	0.69 j	190000	19
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	0.11 j	83000	8.3
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	0.084 Uj	58000	5.8

**Table A-1. Roxana Marsh Conventional Data Results**

<b>Sample ID (in situ depth)</b>	<b>Oil &amp; Grease (%)</b>	<b>TOC (mg/kg)</b>	<b>TOC (%)</b>
FW-RM-14-SS	2.6 j	220000	22
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	0.19 j	130000	13
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	0.11 Uj	65000	6.5
FW-RM-15-SS	2.2 j	230000	23
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	0.16 j	53000	5.3
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	0.12 j	26000	2.6
FW-RM-16-SS	2.2 j	140000	14
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	0.24 j	100000	10
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	0.1 Uj	68000	6.8
FW-RM-17-SS	20 j	210000	21
FW-RM-17-CS-0-1.5 (0.0-2.0)	1.6 j	160000	16
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	0.12 j	19000	1.9
FW-RM-18-SS	4.4 j	240000	24
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	8.7 j	180000	18
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	0.29 j	90000	9.0
FW-RM-19-SS	9.7 j	290000	29
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	5.2 j	120000	12
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	0.19 j	89000	8.9
FW-RM-20-SS	3.7 j	140000	14
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	0.13 Uj	100000	10
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	0.32 j	110000	11
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	0.091 Uj	60000	6.0

<b>Rinsate Blanks - Water</b>	<b>Oil &amp; Grease (mg/L)</b>	<b>TOC (mg/L)</b>
FW-RM-RB-01	1.1 B Au	1 U
FW-RM-RB-02	1.7 B A	1 U

**Notes:**

TOC concentrations are the averages calculated from 4 replicates.

A - Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project-specific criteria or determined from analyte concentrations in the sample and evaluated on a sample-by-sample basis.

B - The analyte has been detected between the method detection limit and the reporting limit.

N - Spiked sample recovery is not within control limits.

U - The analyte was not detected above the reporting limit.

\* - Laboratory Duplicate analyses are not within control limits.

j - Data validation qualifer assigned to indicate an estimated value or estimated detection limit.

u - Data validation qualifer assigned to indicate the analyte was qualified as not detected due to laboratory contamination.  
dup - Field duplicate. RM-21-CS is a field duplicate of RM-1b-CS, and RM-21-SS is a field duplicate of RM-13-SS.

**Table A-2. Roxana Marsh Metals Results**

Sample ID (in situ depth)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
Consensus-Based TEC	<b>9.79</b>	NA	<b>0.99</b>	<b>43.4</b>	<b>35.8</b>	<b>0.18</b>	NA	NA
Consensus-Based PEC	<b>33.01</b>	NA	<b>4.98</b>	<b>111</b>	<b>128</b>	<b>1.06</b>	NA	NA
FW-RM-01-SS	50	680	20	470	1100 Nj	5.1 Nj	20	21 B
FW-RM-01-CS-1-2 (2.1-4.2)	23	150	6.7	66	340 j	1.1	3.8 B	2.6 B
FW-RM-01-CS-2-3.9 (4.2-8.2)	7.2 B	140	1.6 B	34	43 j	0.83 U	4.2 U	0.44 B
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	12 B	150	2.4 B	41	99 j	0.079 B	4.5 U	22 U
FW-RM-21-CS-3.6-5.6 (dup)	5.3 B	100	0.92 B	23	36 j	0.049 B	3 U	16 U
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	3.3 B	85	0.43 B	21	11 Bj	0.031 B	2.4 U	12 U
FW-RM-21-CS-7.0-9.0 (dup)	1.9 B	86	0.63 B	21	11 Bj	0.036 B	2.4 U	12 U
FW-RM-02-SS	32	330	25	300	830 j	3 j	13	14 B
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	2.4 B	53	0.16 B	13	12 j	0.056 B	1.7 U	7.2 U
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	2.5 B	16	0.23 B	6 B	5.5 Bj	0.0088 B	1.5 U	7.2 U
FW-RM-03-SS	13 B	210	8	140	310 j	1.1 j	6.1	4.7 B
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	1 B	75	0.63 B	16	13 j	0.042 B	1.5 U	7.7 U
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	1.4 B	6.9	0.087 B	2.8 B	2.5 BNj	0.0069 B	1.2 U	6.3 U
FW-RM-04-SS	4.2 B	52	1.6 B	29	110 j	0.29 Bj	4.3	1.4 B
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	3.6 B	88	1.5 B	34	92 j	0.098 B	4.2	0.19 B
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	1.7 B	6.6	1.3 U	3.8 B	3.7 Bj	0.27 U	1.3 U	5.8 U
FW-RM-05-SS	97	510	60	730	1300 j	6.4 j	26	44
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	46	150	11	150	1400 j	1.3	1.6 U	6.7 B
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	8.7 U	17	1.7 U	4.3 B	4 Bj	0.37 U	1.7 U	7.9 U
FW-RM-06-SS	11 B	240	6.3	110	300 j	1.6 j	8	7.4 B
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	3.6 BA	52	1.9 UA	19	17 j	0.059 B	1.9 U	9.7 U
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	6.5 UA	8.5	1.3 UA	4 B	3.1 Bj	0.05 U	1.3 U	7 U
FW-RM-07-SS	20	400	16	280	740 j	2.4 j	8.8	10 B
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	2.1 B	94	0.58 B	24	19 j	0.43 U	2.1 U	11 U
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	2.1 B	22	0.16 B	9.4	7.3 j	0.015 B	1.3 U	7.1 U
FW-RM-08-SS	11 B	190	5.4	86	310 j	0.93 Bj	7	3.4 B
FW-RM-08-CS-1-2.3 (1.2-2.7)	4.1 B	69	0.64 B	14	23 j	0.09 Bj	1.5 B	11 U
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	2.6 B	13	0.24 B	5.2 B	4.2 Bj	0.017 Bj	1.1 U	7.3 U

**Table A-2. Roxana Marsh Metals Results**

Sample ID (in situ depth)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
Consensus-Based TEC	<b>9.79</b>	NA	<b>0.99</b>	<b>43.4</b>	<b>35.8</b>	<b>0.18</b>	NA	NA
Consensus-Based PEC	<b>33.01</b>	NA	<b>4.98</b>	<b>111</b>	<b>128</b>	<b>1.06</b>	NA	NA
FW-RM-09-SS	29	410	12	210	700 j	2.6 j	25	9.7 B
FW-RM-09-CS-1-3.5 (1.1-4.0)	5.3 B	89	0.54 B	16	25 j	0.08 Bj	2.7 U	13 U
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	1.9 B	37	0.22 B	9.2 B	6 Bj	0.021 Bj	1.9 U	9.3 U
FW-RM-10-SS	19	280	11	170	630 j	1.8 j	10	7.3 B
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	5.2 B	71	0.65 B	17	34 j	0.093 B	1.8 U	11 U
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	1.8 B	16	1.4 U	6.6 B	4.5 BNj	0.0091 B	1.4 U	7.2 U
FW-RM-11-SS	21 B	210	7.3	98	690 j	0.95	10	3.6 B
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	5.2 BA	79	2.5 UA	18	28 j	0.055 B	1.6 B	13 U
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	3.3 BA	30	1.5 UA	9.5	7.5 Bj	0.015 B	0.98 B	8.7 U
FW-RM-12-SS	61	680	21	520	1200 j	7.8 j	27	41
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	110	200	63	520	2900 j	8.9	5	11
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	1.6 B	41	0.16 B	12	8.7 j	0.018 B	1.6 U	8.1 U
FW-RM-13-SS	30	290	13	180	1000 j	1.4	15	4 B
FW-RM-21-SS (dup)	27	250	13	160	790 j	1.5	10	6.1 B
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	3 B	76	0.27 B	17	14 j	0.034 B	1.2 B	8.9 U
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	2.8 B	45	0.18 B	11	7.1 Bj	0.014 B	1.6 U	7.4 U
FW-RM-14-SS	29	490	18	330	890 j	2.7	17	12 B
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	13 BA	110	1.4 BA	27	230 j	0.41	2 B	14 U
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	2 BA	41	1.9 UA	11	8.6 Bj	0.025 B	1.9	9.6 U
FW-RM-15-SS	28	390	22	290	980 j	3 j	18	10 B
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	2.2 B	79	0.39 B	23	11 j	0.025 B	1.8 U	9.2 U
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	3 B	26	0.13 B	8.2 B	6.1 Bj	0.011 B	1.7 U	8.8 U
FW-RM-16-SS	39	500	21	370	1200 j	1.2 Bj	16	3.6 B
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	10 BA	110	1.8 BA	23	150 Nj	0.4	3.2	14 U
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	1.8 BA	65	1.8 UA	19	8.4 Bj	0.024 B	1.8 U	10 U
FW-RM-17-SS	140	380	52	530	7800 j	5.5 j	11	23
FW-RM-17-CS-0-1.5 (0.0-2.0)	120	340	48	420	8800 j	5.4 j	10	22
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	13	82	4.9	65	620 j	0.11 Bj	1.7	0.74 B

**Table A-2. Roxana Marsh Metals Results**

Sample ID (in situ depth)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)
Consensus-Based TEC	<b>9.79</b>	NA	<b>0.99</b>	<b>43.4</b>	<b>35.8</b>	<b>0.18</b>	NA	NA
Consensus-Based PEC	<b>33.01</b>	NA	<b>4.98</b>	<b>111</b>	<b>128</b>	<b>1.06</b>	NA	NA
FW-RM-18-SS	150	650	72	1300	1400 j	4.6	43	50
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	110	250	52	410	2500 j	9.5	4.6	14
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	3.4 B	79	0.41 B	17	23 j	0.028 B	2.3 U	11 U
FW-RM-19-SS	110	390	65	920	1400 j	5.3	15	31
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	69	130	38	220	2000 j	0.98	4.6	4.2 B
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	2.7 B	47	0.48 B	12	17 j	0.031 B	2.1 U	9.5 U
FW-RM-20-SS	46	270	26	110	2100 j	5.3	3.6	3.6 B
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	3.5 B	86	1.1 B	18	28 j	0.52 U	2.4 U	13 U
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	2 B	49	0.22 B	11	7.5 Bj	0.019 B	2.1 U	9.6 U
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	2.1 B	39	0.26 B	9.6	8.6 j	0.016 B	1.6 U	8 U
Rinsate Blanks	Arsenic (µg/L)	Barium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	Mercury (µg/L)	Selenium (µg/L)	Silver (µg/L)
FW-RM-RB-01	50 U	0.94 B	10 U	1.1 B	3.7 B	0.2 U	10 U	50 U
FW-RM-RB-02	50 U	0.38 B	10 U	0.88 B	50 U	0.2 U	10 U	50 U

**Notes:**

26 - Exceeds PEC

A - Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit.

Additionally, method blank acceptance may be based on project-specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample-by-sample basis.

B - The analyte has been detected between the method detection limit and the reporting limit.

N - Spiked sample recovery is not within control limits.

U - The analyte was not detected above the reporting limit.

j - Data validation qualifer assigned to indicate an estimated value or estimated detection limit.

dup - Field duplicate. RM-21-CS is a field duplicate of RM-1b-CS, and RM-21-SS is a field duplicate of RM-13-SS

TEC - Threshold Effect Concentration (MacDonald et al., 2000)

PEC - Probable Effect Concentration (MacDonald et al., 2000)

mg/kg - milligrams per kilogram dry weight

µg/L - micrograms per liter

**Table A-3. Roxana Marsh AVS and SEM Metals Results**

Sample ID (in situ depth)	Antimony - SEM (µmole/g)	Arsenic - SEM (µmole/g)	Cadmium - SEM (µmole/g)	Chromium - SEM (µmole/g)	Copper - SEM (µmole/g)	Lead - SEM (µmole/g)	Mercury - SEM (µmole/g)	Nickel - SEM (µmole/g)	Silver - SEM (µmole/g)	Zinc - SEM (µmole/g)
	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)
FW-RM-01-SS	0.032 B	0.35 BA	0.181 B	8.84	5.29	6.44	1.21 U	2.89	1.12 U	58.1
FW-RM-01-CS-1-2 (2.1-4.2)	0.946 U	0.09 B	0.061 B	0.807 B	1.28 B	1.95	1.15 U	0.32 BA	1.07 U	27.2
FW-RM-01-CS-2-3.9 (4.2-8.2)	0.855 U	0.04 B	0.011 B	0.225 BA	0.47 B	0.23 BA	1.04 U	0.27 BA	0.965 U	2.44 A
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	0.916 U	0.06 B	0.01 B	0.185 BA	0.38 BA	0.19 BA	0.0016 BA	0.25 BA	1.03 U	2.73 A
FW-RM-21-CS-3.6-5.6 (dup)	0.65 U	0.03 B	0.006 B	0.081 BA	0.28 BA	0.10 BA	0.789 U	0.17 BA	0.733 U	1.35 A
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	0.50 U	0.01 B	0.002 B	0.039 B	0.24 BA	0.06 B	0.611 U	0.13 BA	0.568 U	0.69 BA
FW-RM-21-CS-7.0-9.0 (dup)	0.50 U	0.02 B	0.005 B	0.032 BA	0.21 BA	0.05 BA	0.0013 BA	0.13 BA	0.56 U	0.62 BA
FW-RM-02-SS	0.063 B	0.30 B	0.216 B	3.08	4.75	5.42	0.916 U	1.13 B	0.004 B	36.9
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	0.347 U	0.02 B	0.004 B	0.027 B	0.15 BA	0.10 B	0.421 U	0.17 B	0.391 U	1.62 A
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	0.32 U	0.03 B	0.001 B	0.016 B	0.10 BA	0.03 B	0.389 U	0.11 BA	0.361 U	0.24 BAu
FW-RM-03-SS	0.014 B	0.10 BA	0.082 B	2.27	1.87	2.23	0.74 U	0.84 B	0.688 U	22.2
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	0.318 U	0.02 B	0.004 B	0.076 BA	0.18 B	0.09 BA	0.386 U	0.24 BA	0.359 U	1.02 A
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	0.266 U	0.02 B	0.001 B	0.016 BA	0.05 BA	0.02 BA	0.323 U	0.06 BA	0.30 U	0.2 BA
FW-RM-04-SS	0.106 B	0.08 BA	0.025 B	0.305 B	1.55	0.71	0.515 U	0.32 B	0.003 B	5.43
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	0.006 B	0.03 B	0.01 B	0.161 B	0.46 B	0.34	0.0003 BAu	0.24 BA	0.426 U	2.46
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	0.282 U	0.03 B	0.001 B	0.02 BAu	0.05 BA	0.02 BAu	0.0001 BA	0.07 BAu	0.318 U	0.24 BAu
FW-RM-05-SS	0.127 B	0.87 B	1.22	6.69	7.11	8.84	1.03 U	1.67 B	0.00523 B	113
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	0.37 U	0.08 B	0.015 B	0.352 B	0.27 BA	1.43	0.449 U	0.33 B	0.417 U	8.33
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	0.377 U	0.01 B	0.409 U	0.018 B	0.08 BA	0.03 B	0.458 U	0.05 BA	0.426 U	0.3 BA
FW-RM-06-SS	0.036 B	0.13 BA	0.091 B	2.67	3.77	2.88	0.74 U	0.89 B	0.004 B	25.1
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	0.40 U	0.04 B	0.005 B	0.118 B	0.39 B	0.16 B	0.486 U	0.24 B	0.452 U	1.2 j
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	0.305 U	0.50 U	0.001 B	0.016 B	0.03 BA	0.01 B	0.371 U	0.04 B	0.345 U	0.18 BAj
FW-RM-07-SS	0.008 B	0.10 BA	0.103 B	3.17	1.94	2.67	0.72 U	0.81 B	0.002 B	25.4
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	0.439 U	0.04 B	0.007 B	0.12 BA	0.30 B	0.21 BA	0.533 U	0.24 BA	0.495 U	1.63 A
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	0.293 U	0.02 B	0.001 B	0.024 BA	0.06 BA	0.03 BA	0.712 U	0.08 BA	0.331 U	0.28 BA
FW-RM-08-SS	0.023 B	0.06 BA	0.044 B	0.938 B	1.11 B	1.79	0.82 U	0.48 B	0.762 U	13
FW-RM-08-CS-1-2.3 (1.2-2.7)	0.459 U	0.04 BA	0.004 B	0.068 BA	0.26 BA	0.13 B	0.0014 BA	0.26 BA	0.518 U	1.5 A
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	0.308 U	0.02 BAu	0.334 U	0.021 BA	0.04 BAu	0.02 B	0.374 U	0.07 BA	0.348 U	0.28 BA

**Table A-3. Roxana Marsh AVS and SEM Metals Results**

Sample ID (in situ depth)	Antimony - SEM	Arsenic - SEM	Cadmium - SEM	Chromium - SEM	Copper - SEM	Lead - SEM	Mercury - SEM	Nickel - SEM	Silver - SEM	Zinc - SEM
	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)	(µmole/g)
FW-RM-09-SS	0.708 B	0.44 B	0.122 B	3.39	13.7	5.32	1.14 U	2.27	0.0228 B	35.9
FW-RM-09-CS-1-3.5 (1.1-4.0)	0.586 U	0.08 BA	0.002 B	0.031 BA	0.25 BA	0.09 B	0.0003 BA	0.27 BA	0.662 U	1.71 A
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	0.408 U	0.02 BA	0.002 B	0.029 BA	0.11 BA	0.07 B	0.0003 BA	0.09 BA	0.461 U	0.43 BA
FW-RM-10-SS	0.028 B	0.13 BA	0.116 B	2.33	4.04	4.17	0.848 U	1.19 B	0.003 B	29.7
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	0.005 B	0.05 B	0.006 B	0.075 B	0.36 BA	0.24 B	0.547 U	0.21 B	0.508 U	1.51 A
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	0.004 B	0.02 B	0.001 B	0.021 B	0.06 BA	0.02 B	0.373 U	0.05 BA	0.346 U	0.25 BAj
FW-RM-11-SS	0.014 B	0.06 B	0.065 B	1.15 B	0.10 BA	3.8	1.15 U	0.76 B	1.07 U	17
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	0.007 B	0.07 B	0.007 B	0.049 B	0.33 B	0.23 B	0.658 U	0.26 B	0.611 U	1.74 j
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	0.358 U	0.03 B	0.001 B	0.036 B	0.15 B	0.07 B	0.434 U	0.11 B	0.404 U	0.45 BAj
FW-RM-12-SS	0.164 B	1.18 B	0.332 B	7.33	12.5	10.5	0.0002 BA	2.27	0.111 B	54.2
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	0.46 U	0.39 B	0.467 B	4.19	1.88	18.2	0.559 U	1.75 B	0.52 U	108
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	0.385 U	0.03 B	0.008 B	0.022 B	0.16 BA	0.06 B	0.468 U	0.10 BA	0.435 U	3.01
FW-RM-13-SS	0.02 B	0.12 B	0.13 B	1.93	1.17 B	5.98	0.868 U	1.33 B	0.807 U	31.5
FW-RM-21-SS (dup)	0.03 B	0.16 B	0.122 B	1.94	2.23	4.84	0.848 U	1.31 B	0.788 U	32.3
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	0.417 U	0.02 B	0.003 B	0.03 B	0.21 BA	0.07 B	0.507 U	0.19 B	0.471 U	0.61 BA
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	0.347 U	0.02 B	0.001 B	0.019 B	0.13 BA	0.04 B	0.421 U	0.09 BA	0.391 U	0.33 BA
FW-RM-14-SS	0.043 B	0.15 B	0.145 B	4.27	2.6	4.59	1.02 U	1.83	0.946 U	37.1
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	0.024 B	0.13 B	0.032 B	0.037 B	0.64 B	1.4	0.765 U	0.44 B	0.711 U	7.52 j
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	0.455 U	0.03 B	0.001 B	0.017 B	0.17 B	0.05 B	0.553 U	0.12 B	0.514 U	0.28 BAj
FW-RM-15-SS	0.129 B	0.40 B	0.204 B	3.78	7.51	6.54	0.937 U	1.94	0.00721 B	41.9
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	0.392 U	0.02 B	0.002 B	0.033 B	0.21 BA	0.06 B	0.477 U	0.19 B	0.443 U	0.49 BA
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	0.342 U	0.01 B	0.001 B	0.018 B	0.11 BA	0.03 B	0.415 U	0.07 BA	0.386 U	0.28 BA
FW-RM-16-SS	0.023 B	0.20 BA	0.144 B	2.21	1.99	6.09	0.951 U	1.26 B	0.884 U	37.6
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	0.59 U	0.05 B	0.009 B	0.033 B	0.34 B	0.25 B	0.716 U	0.31 B	0.002 B	2.47 j
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	0.421 U	0.02 B	0.002 B	0.03 B	0.17 B	0.06 B	0.511 U	0.12 B	0.475 U	0.44 BAEj
FW-RM-17-SS	0.628 U	0.13 BA	0.433 B	8.45	0.65 BA	27.5	0.762 U	1.09 B	0.709 U	80.3
FW-RM-17-CS-0-1.5 (0.0-2.0)	0.59 U	0.20 BA	0.353 B	6.82	1.63	68	0.716 U	0.96 B	0.666 U	70.5
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	0.341 U	0.04 B	0.002 B	0.029 BA	0.10 BA	0.08 BA	0.414 U	0.10 BA	0.385 U	0.44 BA

**Table A-3. Roxana Marsh AVS and SEM Metals Results**

Sample ID (in situ depth)	Antimony -	Arsenic -	Cadmium -	Chromium	Copper-	Lead -	Mercury -	Nickel -	Silver -	Zinc -
	SEM (µmole/g)									
FW-RM-18-SS	0.09 B	0.70 B	0.247 B	19.2	4.91	7.05	1.01 U	2.12	0.0199 B	47.9
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	0.578 U	0.07 B	0.473 B	3.72	0.22 BA	5.96	0.702 U	1.17 B	0.653 U	124
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	0.50 U	0.02 B	0.002 B	0.02 B	0.20 BA	0.05 B	0.612 U	0.12 BA	0.569 U	0.56 BA
FW-RM-19-SS	0.013 B	0.36 B	0.764	12.8	3.48	11.1	0.804 U	1.93	0.002 B	95.7
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	0.008 B	0.22 B	0.16 B	0.859 B	0.96 B	2.25	0.679 U	0.46 B	0.631 U	20.1
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	0.435 U	0.02 B	0.005 B	0.056 B	0.20 BA	0.19 B	0.528 U	0.11 BA	0.491 U	1.21 A
FW-RM-20-SS	0.561 U	0.08 B	0.226 B	0.812 B	0.78 B	10.4	0.681 U	0.28 BA	0.633 U	71.9
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	0.539 U	0.04 B	0.009 B	0.03 BA	0.23 BA	0.11 BA	0.654 U	0.13 BA	0.608 U	5.36
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	0.44 U	0.01 B	0.001 B	0.019 B	0.15 BA	0.04 B	0.534 U	0.09 BA	0.496 U	0.92 A
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	0.373 U	0.01 B	0.001 B	0.022 B	0.16 BA	0.04 B	0.453 U	0.09 BA	0.421 U	0.42 BA

**Table A-3. Roxana Marsh AVS and SEM Metals Results**

<b>Sample ID (in situ depth)</b>	<b>AVS (<math>\mu\text{mole/g}</math>)</b>	<b>SEM (<math>\mu\text{mole/g}</math>)</b>	<b>SEM - AVS</b>
FW-RM-01-SS	140	73.2	-67.2
FW-RM-01-CS-1-2 (2.1-4.2)	50 j	31.1	-18.8
FW-RM-01-CS-2-3.9 (4.2-8.2)	1.06 j	3.67	2.6
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	1.25 j	3.82	2.6
FW-RM-21-CS-3.6-5.6 (dup)	3.43 j	2.08	-1.3
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	0.34 U	1.26	0.9
FW-RM-21-CS-7.0-9.0 (dup)	0.53 j	1.16	0.6
FW-RM-02-SS	109	48.4	-60.7
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	1.28	2.14	0.9
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	0.21 U	0.57	0.4
FW-RM-03-SS	62	27.4	-35.0
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	1.72 j	1.61	-0.1
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	0.17 UN*r	0.40	0.2 r
FW-RM-04-SS	2.99	8.04	5.0
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	15	3.61	-11.4
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	0.18 U	0.46	0.3
FW-RM-05-SS	97	131.8	35.2
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	19	10.5	-8.5
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	0.94	0.77	-0.2
FW-RM-06-SS	44	32.7	-10.9
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	0.34 j	2.10	1.8
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	0.20 Ur	0.35	0.2 r
FW-RM-07-SS	62	30.9	-31.5
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	1.87 j	2.51	0.6
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	0.59 j	0.53	-0.1
FW-RM-08-SS	34	16.6	-17.7
FW-RM-08-CS-1-2.3 (1.2-2.7)	0.94	2.28	1.3
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	0.22 U	0.67	0.5

**Table A-3. Roxana Marsh AVS and SEM Metals Results**

Sample ID (in situ depth)	AVS ( $\mu\text{mole/g}$ )	SEM ( $\mu\text{mole/g}$ )	SEM - AVS
FW-RM-09-SS	2.90	57.3	54.4
FW-RM-09-CS-1-3.5 (1.1-4.0)	0.41 U	2.49	2.1
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	0.29 U	0.81	0.5
FW-RM-10-SS	47	39.2	-7.6
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	0.30 U	2.46	2.2
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	0.20 U	0.47	0.3
FW-RM-11-SS	59	22.0	-37.3
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	0.34 Ur	2.73	2.4 r
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	0.23 Ur	0.88	0.6 r
FW-RM-12-SS	2.59	79.9	77.3
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	65	130.4	64.9
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	1.40	3.44	2.0
FW-RM-13-SS	87 j	40.3	-47.0
FW-RM-21-SS (dup)	47 j	41.0	-5.8
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	0.81	1.20	0.4
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	0.23 U	0.68	0.5
FW-RM-14-SS	59 j	46.5	-12.8
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	9.36 j	10.2	0.8
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	0.30 Ur	0.75	0.5 r
FW-RM-15-SS	20	58.1	38.4
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	0.31	1.06	0.7
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	0.23 U	0.58	0.4
FW-RM-16-SS	56	47.3	-8.8
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	1.03 Nj	3.38	2.3
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	0.27 Ur	0.90	0.6 r
FW-RM-17-SS	374	110.2	-264.1
FW-RM-17-CS-0-1.5 (0.0-2.0)	312	141.6	-170.3
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	0.22 U	0.82	0.6

**Table A-3. Roxana Marsh AVS and SEM Metals Results**

Sample ID (in situ depth)	AVS ( $\mu\text{mole/g}$ )	SEM ( $\mu\text{mole/g}$ )	SEM - AVS
FW-RM-18-SS	72 j	62.2	-9.5
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	499	132.0	-367.0
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	0.34 U	1.07	0.7
FW-RM-19-SS	196 j	113.0	-83.5
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	9.98	24.09	14.1
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	1.03	1.83	0.8
FW-RM-20-SS	72 j	83.7	12.0
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	0.59 j	5.99	5.4
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	0.29 U	1.32	1.0
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	0.28	0.81	0.5

**Notes:**

A - Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit.

Additionally, method blank acceptance may be based on project-specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample-by-sample basis.

B - The analyte has been detected between the method detection limit and the reporting limit.

C - Elevated detection limit due to matrix effects.

E - Estimated concentration due to matrix interferences. During the metals analysis using the inductively coupled plasma (ICP), the serial dilution failed to meet the established control limits of 0 to 10 percent and the sample concentration is greater than 50 times the IDL (100 times the IDL for analysis done on the ICP-MS). The result was flagged with the E qualifier to indicate that a physical interference was observed.

N - Spiked sample recovery is not within control limits.

U - The analyte was not detected above the reporting limit.

\* - Laboratory duplicate analyses are not within control limits.

j - Data validation qualifier assigned to indicate an estimated value or estimated detection limit.

u - Data validation qualifier assigned to indicate the analyte was qualified as not detected due to laboratory contamination.

r - Data validation qualifier assigned to indicate a value that is not usable.

AVS - Acid Volatile Sulfide

SEM - Simultaneously Extracted Metals. SEM column is sum of Cd, Cu, Pb, Ni, 1/2Ag, Zn.

dup - Field duplicate. RM-21-CS is a field duplicate of RM-1b-CS, and RM-21-SS is a field duplicate of RM-13-SS.

$\mu\text{mole/g}$  - micromole per gram

**Table A-4. Roxana Marsh PAH Results**

Sample ID (in situ depth)	Acenaphthene (µg/kg)	Acenaph-thylene (µg/kg)	Anthracene (µg/kg)	Benzo(a) anthracene (µg/kg)	Benzo(a) pyrene (µg/kg)	Benzo(b) fluoranthene (µg/kg)	Benzo(g,h,i) perylene (µg/kg)	Benzo(k) fluoranthene (µg/kg)	Chrysene (µg/kg)
<b>Consensus-Based TEC</b>	<b>6.71<sup>a</sup></b>	<b>5.87<sup>a</sup></b>	<b>57.2</b>	<b>108</b>	<b>150</b>	NA	NA	NA	166
<b>Consensus-Based PEC</b>	<b>88.9<sup>b</sup></b>	<b>128<sup>b</sup></b>	<b>845</b>	<b>1050</b>	<b>1450</b>	NA	NA	NA	<b>1290</b>
FW-RM-01-SS	1800 U	1600 U	1200 U	3800	5500	8900	21000 j	3400 U	6500
FW-RM-01-CS-1-2 (2.1-4.2)	70000	3800	44000	42000	17000	20000	8700	6200	47000
FW-RM-01-CS-2-3.9 (4.2-8.2)	310 U	280 U	200 U	280 U	220 U	380 U	420 U	580 U	430 U
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	340 U	300 U	210 U	300 U	230 U	410 U	450 U	620 U	460 U
FW-RM-21-CS-3.6-5.6 (dup)	240 U	210 U	150 U	210 U	160 U	290 U	320 U	440 U	330 U
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	190 U	160 U	120 U	170 U	130 U	220 U	250 U	340 U	250 U
FW-RM-21-CS-7.0-9.0 (dup)	180 U	160 U	110 U	160 U	120 U	220 U	240 U	340 U	250 U
FW-RM-02-SS	1400 U	1200 U	870 U	4700	6000	11000	18000 j	2600 U	12000
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	130 U	110 U	80 U	110 U	87 U	600	170 U	240 U	280
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	120 U	100 U	74 U	110 U	81 U	140 U	160 U	220 U	160 U
FW-RM-03-SS	1100 U	990 U	700 U	2700	2300	4100	12000 j	2100 U	5100
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	120 U	100 U	74 U	100 U	80 U	140 U	160 U	220 U	160 U
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	98 UN	87 UN	61 U	87 U	67 U	120 U	130 U	180 U	130 U
FW-RM-04-SS	470 U	410 U	290 U	460	570	980	4900 j	860 U	710
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	140 U	120 U	87 U	120 U	120	740	190 U	260 U	240
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	100 U	92 U	65 U	92 U	71 U	130 U	140 U	190 U	140 U
FW-RM-05-SS	3100 U	2800 U	9000	82000	47000	79000	55000 j	14000	180000
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	3400 U	3000 U	9500	78000	26000	65000	40000	7300	260000
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	140 U	120 U	87 U	120 U	95 U	170 U	190 U	260 U	190 U
FW-RM-06-SS	1100 U	990 U	700 U	2200	2200	3700	12000 j	2100 U	3800
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	74 U	65 U	46 U	170	150	530	240	140 U	280
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	56 U	50 U	35 U	50 U	38 U	68 U	75 U	100 U	77 U
FW-RM-07-SS	1100 U	970 U	690 U	3000	2600	4600	12000 j	2000 U	6100
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	160 U	140 U	100 U	140 U	110 U	200 U	220 U	300 U	220 U
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	110 U	96 U	68 U	96 U	74 U	130 U	140 U	200 U	150 U
FW-RM-08-SS	750 U	660 U	470 U	1000	970	1800	7700 j	1400 U	1600
FW-RM-08-CS-1-2.3 (1.2-2.7)	170 U	150 U	110 U	150 U	120 U	200 U	230 U	310 U	230 U
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	110 U	100 U	71 U	100 U	78 U	140 U	150 U	210 U	150 U

**Table A-4. Roxana Marsh PAH Results**

Sample ID (in situ depth)	Acenaphthene ( $\mu\text{g/kg}$ )	Acenaph-thylene ( $\mu\text{g/kg}$ )	Anthracene ( $\mu\text{g/kg}$ )	Benzo(a) anthracene ( $\mu\text{g/kg}$ )	Benzo(a) pyrene ( $\mu\text{g/kg}$ )	Benzo(b) fluoranthene ( $\mu\text{g/kg}$ )	Benzo(g,h,i) perylene ( $\mu\text{g/kg}$ )	Benzo(k) fluoranthene ( $\mu\text{g/kg}$ )	Chrysene ( $\mu\text{g/kg}$ )
<b>Consensus-Based TEC</b>	<b>6.71<sup>a</sup></b>	<b>5.87<sup>a</sup></b>	<b>57.2</b>	<b>108</b>	<b>150</b>	NA	NA	NA	166
<b>Consensus-Based PEC</b>	<b>88.9<sup>b</sup></b>	<b>128<sup>b</sup></b>	<b>845</b>	<b>1050</b>	<b>1450</b>	NA	NA	NA	<b>1290</b>
FW-RM-09-SS	1700 U	1500 U	1100 U	2300	3500	5400	18000 j	3200 U	3200
FW-RM-09-CS-1-3.5 (1.1-4.0)	220 U	190 U	140 U	190 U	150 U	260 U	290 U	400 U	290 U
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	150 U	130 U	94 U	130 U	100 U	180 U	200 U	280 U	200 U
FW-RM-10-SS	260 U	300	260	2100	1900	3900	3600	1000	3500
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	170 U	150 U	100 U	150 U	110 U	200 U	220 U	310 U	230 U
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	110 UN	100 UN	71 U	100 U	77 U	140 U	150 U	210 U	150 U
FW-RM-11-SS	700 U	620 U	440 U	2400	2000	5500	3200	1300 U	3500
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	100 U	88 U	63 U	89 U	68 U	120 U	130 U	180 U	140 U
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	66 U	58 U	41 U	59 U	45 U	80 U	88 U	120 U	90 U
FW-RM-12-SS	1600 U	1600	1000 U	3800	5300	8900	20000 j	3200	5700
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	5100 U	4500 U	24000	97000	30000	68000	45000	9400 U	280000
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	140 U	130 U	89 U	130 U	97 U	170 U	190 U	260 U	190 U
FW-RM-13-SS	1300 U	1200 U	830 U	3100	2900	9200	4600	2400 U	5400
FW-RM-21-SS (dup)	1300 U	1100 U	810 U	2700	2600	8400	3200	2400 U	4800
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	150 U	140 U	96 U	140 U	110 U	190 U	210 U	280 U	210 U
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	130 U	110 U	80 U	110 U	87 U	150 U	170 U	240 U	170 U
FW-RM-14-SS	3100 U	2700 U	1900 U	6000	7200	22000	9900	5700 U	12000
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	120 U	100 U	73 U	130	95	550	160 U	210 U	230
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	84 U	74 U	53 U	75 U	57 U	100 U	110 U	150 U	110 U
FW-RM-15-SS	1400 U	1300 U	890 U	3000	4200	7200	16000 j	2600 U	6000
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	140 U	130 U	91 U	130 U	99 U	180 U	190 U	270 U	200 U
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	130 U	110 U	79 U	110 U	86 U	150 U	170 U	230 U	170 U
FW-RM-16-SS	1400 U	1300 U	910 U	2000	2100	3900	15000 j	2700 U	4400
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	110 U	96 U	68 U	97 U	74 U	130 U	150 U	200 U	150 U
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	77 U	69 U	49 U	69 U	53 U	94 U	100 U	140 U	110 U
FW-RM-17-SS	6900 U	6100 U	26000	160000	50000	81000	89000 j	14000	370000
FW-RM-17-CS-0-1.5 (0.0-2.0)	2200 U	1900 U	17000	100000	35000	50000	39000 j	7700	240000
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	130 U	110 U	79 U	360	130	150 U	1300	230 U	880

**Table A-4. Roxana Marsh PAH Results**

Sample ID (in situ depth)	Acenaphthene (µg/kg)	Acenaph-thylene (µg/kg)	Anthracene (µg/kg)	Benzo(a)anthracene (µg/kg)	Benzo(a)pyrene (µg/kg)	Benzo(b)fluoranthene (µg/kg)	Benzo(g,h,i)perylene (µg/kg)	Benzo(k)fluoranthene (µg/kg)	Chrysene (µg/kg)
<b>Consensus-Based TEC</b>	<b>6.71<sup>a</sup></b>	<b>5.87<sup>a</sup></b>	<b>57.2</b>	<b>108</b>	<b>150</b>	NA	NA	NA	166
<b>Consensus-Based PEC</b>	<b>88.9<sup>b</sup></b>	<b>128<sup>b</sup></b>	<b>845</b>	<b>1050</b>	<b>1450</b>	NA	NA	NA	<b>1290</b>
FW-RM-18-SS	1500 U	1400	960 U	3800	5600	13000	11000	2800 U	6400
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	2700	1900 U	6500	35000	15000	28000	17000	3900	82000
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	190 U	160 U	120 U	170 U	130 U	230 U	250 U	340 U	250 U
FW-RM-19-SS	4700	2200 U	18000	130000	49000	84000	67000	10000	310000
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	1000 U	910 U	5900	46000	15000	27000	18000	2700	97000
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	160 U	140 U	100 U	310	110 U	820	210 U	290 U	940
FW-RM-20-SS	3100	4200	3400	10000	7900	16000	18000	3800 U	26000
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	200 U	180 U	120 U	500	420	1200	670	370 U	900
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	160 U	140 U	100 U	140 U	110 U	720	220 U	300 U	310
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	140 U	120 U	86 U	120 U	94 U	170 U	180 U	250 U	190 U
Sample ID	Acenaphthene (µg/L)	Acenaphthyl ene (µg/L)	Anthracene (µg/L)	Benzo(a)anthracene (µg/L)	Benzo(a)pyrene (µg/L)	Benzo(b)fluoranthene (µg/L)	Benzo(g,h,i)perylene (µg/L)	Benzo(k)fluoranthene (µg/L)	Chrysene (µg/L)
FW-RM-RB-01	2.2 U	1.8 U	1.8 U	2.3 U	2.7 U	2.9 U	3.4 U	2.4 U	2.2 U
FW-RM-RB-02	2.2 U	1.8 U	1.8 U	2.3 U	2.7 U	2.9 U	3.4 U	2.4 U	2.2 U

**Table A-4. Roxana Marsh PAH Results**

Sample ID (in situ depth)	Dibenzo(a,h)anthracene ( $\mu\text{g/kg}$ )	Fluoran-thene ( $\mu\text{g/kg}$ )	Fluorene ( $\mu\text{g/kg}$ )	Indeno (1,2,3-cd) pyrene ( $\mu\text{g/kg}$ )	Naphthalene ( $\mu\text{g/kg}$ )	Phenanthrene ( $\mu\text{g/kg}$ )	Pyrene ( $\mu\text{g/kg}$ )	Total PAHs <sup>1</sup>	Total PAHs <sup>2</sup>	Total PAHs <sup>3</sup>
<b>Consensus-Based TEC</b>	33	423	77.4	NA	176	204	195	1610	1610	1610
<b>Consensus-Based PEC</b>	135 <sup>b</sup>	2230	536	NA	561	1170	1520	22800	22800	22800
FW-RM-01-SS	1700 UN	4700	2000 U	19000	1900 U	2100 U	13000 Nj	82400 Nj	90250 Nj	85800 Nj
FW-RM-01-CS-1-2 (2.1-4.2)	3900	51000	33000	11000	3300	140000	91000	591900	591900	591900
FW-RM-01-CS-2-3.9 (4.2-8.2)	300 U	310 U	340 U	690 U	320 U	940	470	1410	3940	5580
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	320 U	330 U	360 U	740 U	350 U	680	430 U	680	3605	5570
FW-RM-21-CS-3.6-5.6 (dup)	230 U	230 U	260 U	520 U	250 U	410	310 U	410	2485	3880
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	170 U	180 U	200 U	400 U	190 U	250	240 U	250	1855	2940
FW-RM-21-CS-7.0-9.0 (dup)	170 U	180 U	200 U	400 U	190 U	210 U	240 U	400 U	1685 U	2860 U
FW-RM-02-SS	14000	2900	1500 U	15000	1400 U	1600 U	12000 j	95600 j	100885 j	98200 j
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	120 U	120 U	140 U	280 U	130 U	140 U	170	1050	1978.5	2777
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	110 U	120 U	130 U	260 U	120 U	130 U	150 U	260 U	1092.5 U	2065 U
FW-RM-03-SS	9900	2100	1200 U	11000	1100 U	1300 U	7100 j	56300 j	60545 j	59100 j
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	110 U	110 U	130 U	260 U	120 U	130 U	150 U	260 U	1082 U	2044 U
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	92 U	96 U	100 U	210 U	100 UN	110 U	130 U	210 U	899 U	1700 U
FW-RM-04-SS	440 U	460 U	500 U	4400	480 U	530 U	900 j	12920 j	15140 j	16040 j
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	130 U	200	150 U	300 U	140 U	160 U	300	1600	2498.5	3257
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	98 U	100 U	110 U	230 U	110 U	120 U	130 U	230 U	959 U	1818 U
FW-RM-05-SS	38000	29000	9400	41000	3200 U	3500 U	220000 j	803400 j	809700 j	803400 j
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	18000	65000	5300	20000	3500 U	3900 U	290000	884100	891000	884100
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	130 U	140 U	150 U	300 U	140 U	160 U	180 U	300 U	1286 U	2432 U
FW-RM-06-SS	1100 U	2200	1200 U	11000	1100 U	1300 U	5900 j	43000 j	47795 j	45800 j
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	69 U	210	79 U	220	76 U	83 U	350	2150	2466	2782
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	53 U	55 U	60 U	120 U	58 U	64 U	72 U	120 U	515.5 U	1031 U
FW-RM-07-SS	10000	2800	1200 U	11000	1100 U	1200 U	8400 j	60500 j	64630 j	63190 j
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	150 U	160 U	170 U	350 U	170 U	180 U	210 U	350 U	1490 U	2530 U
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	100 U	110 U	120 U	240 U	110 U	120 U	140 U	240 U	1002 U	1894 U
FW-RM-08-SS	700 U	920	800 U	7100	760 U	840 U	2400 j	23490 j	26680 j	26200 j
FW-RM-08-CS-1-2.3 (1.2-2.7)	160 U	170 U	180 U	370 U	170 U	190 U	220 U	370 U	1565 U	2650 U
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	110 U	110 U	120 U	250 U	120 U	130 U	150 U	250 U	1049.5 U	1989 U

**Table A-4. Roxana Marsh PAH Results**

Sample ID (in situ depth)	Dibenzo(a,h)anthracene ( $\mu\text{g/kg}$ )	Fluoran-thene ( $\mu\text{g/kg}$ )	Fluorene ( $\mu\text{g/kg}$ )	Indeno (1,2,3-cd) pyrene ( $\mu\text{g/kg}$ )	Naphthalene ( $\mu\text{g/kg}$ )	Phenanthrene ( $\mu\text{g/kg}$ )	Pyrene ( $\mu\text{g/kg}$ )	Total PAHs <sup>1</sup>	Total PAHs <sup>2</sup>	Total PAHs <sup>3</sup>
<b>Consensus-Based TEC</b>	33	423	77.4	NA	176	204	195	1610	1610	1610
<b>Consensus-Based PEC</b>	135 <sup>b</sup>	2230	536	NA	561	1170	1520	22800	22800	22800
FW-RM-09-SS	1600 U	2300	1800 U	17000	1800 U	1900 U	4700 j	56400 j	63700 j	59600 j
FW-RM-09-CS-1-3.5 (1.1-4.0)	200 U	210 U	230 U	470 U	220 U	240 U	280 U	470 U	1990 U	3370 U
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	140 U	150 U	160 U	330 U	150 U	170 U	190 U	330 U	1377 U	2334 U
FW-RM-10-SS	2500	2500	280 U	3400	260 U	720	5700	31380	31780	31920
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	160 U	160 U	180 U	360 U	170 U	190 U	210 U	360 U	1535 U	2590 U
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	110 U	110 U	120 U	250 U	120 UN	130 U	150 U	250 U	1049 U	1988 U
FW-RM-11-SS	660 U	2900	750 U	2400	720 U	790 U	4600	26500	29490	29030
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	94 U	97 U	110 U	220 U	100 U	110 U	130 U	220 U	919.5 U	1739 U
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	62 U	64 U	71 U	140 U	67 U	74 U	85 U	140 U	605 U	1210 U
FW-RM-12-SS	15000	4100	1800 U	18000	1700 U	2300	7300 j	95200 j	98250 j	95200 j
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	9400	95000	13000	24000	5200 U	5700 U	390000	1075400	1090350	1084800
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	130 U	140 U	150 U	310 U	150 U	160 U	260	260	1478	2426
FW-RM-13-SS	1200 U	3400	1400 U	4300	1300 U	1500 U	5900	38800	44365	42030
FW-RM-21-SS (dup)	1200 U	3300	1400 U	2900	1300 U	1500 U	5300	33200	38705	36410
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	140 U	150 U	160 U	340 U	160 U	170 U	200 U	340 U	1423 U	2416 U
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	120 U	120 U	140 U	280 U	130 U	140 U	160 U	280 U	1168.5 U	2207 U
FW-RM-14-SS	2900 U	9300	3300 U	7500	3200 U	3500 U	13000	86900	100050	92600
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	110 U	240	120 U	250 U	120 U	160	310	1715	2346.5	2858
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	79 U	82 U	90 U	180 U	86 U	95 U	110 U	180 U	767.5 U	1535 U
FW-RM-15-SS	13000	3300	1500 U	15000	1500 U	1600 U	6900 j	74600 j	79995 j	77200 j
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	140 U	140 U	150 U	320 U	150 U	160 U	190 U	320 U	1340 U	2270 U
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	120 U	120 U	140 U	270 U	130 U	140 U	160 U	270 U	1157.5 U	2185 U
FW-RM-16-SS	1400 U	2100	1500 U	14000	1500 U	1600 U	5300 j	48800 j	54955 j	51500 j
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	100 U	110 U	120 U	240 U	110 U	120 U	140 U	240 U	1007.5 U	1905 U
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	73 U	76 U	83 U	170 U	79 U	88 U	100 U	170 U	715 U	1430 U
FW-RM-17-SS	73000	100000	20000	74000	7100 U	7800 U	580000 j	1637000 j	1650950 j	1637000 j
FW-RM-17-CS-0-1.5 (0.0-2.0)	27000	58000	11000	30000	2200 U	3200	390000 Dj	1007900 j	1011050 j	1007900 j
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	1100	270	130 U	1100	130 U	140 U	1000	6140	6689.5	7109

**Table A-4. Roxana Marsh PAH Results**

Sample ID (in situ depth)	Dibenzo(a,h) anthracene ( $\mu\text{g}/\text{kg}$ )	Fluoran-thene ( $\mu\text{g}/\text{kg}$ )	Fluorene ( $\mu\text{g}/\text{kg}$ )	Indeno (1,2,3-cd) pyrene ( $\mu\text{g}/\text{kg}$ )	Naphthalene ( $\mu\text{g}/\text{kg}$ )	Phenan-threne ( $\mu\text{g}/\text{kg}$ )	Pyrene ( $\mu\text{g}/\text{kg}$ )	Total PAHs <sup>1</sup>	Total PAHs <sup>2</sup>	Total PAHs <sup>3</sup>
<b>Consensus-Based TEC</b>	33	423	77.4	NA	176	204	195	1610	1610	1610
<b>Consensus-Based PEC</b>	135 <sup>b</sup>	2230	536	NA	561	1170	1520	22800	22800	22800
FW-RM-18-SS	1400 U	4500	1600 U	11000	1600 U	1700 U	7100	63800	69580	66600
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	7700	29000	4800	12000	2200 U	2400 U	100000	343600	346850	343600
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	180 U	180 U	200 U	410 U	190 U	210 U	240 U	410 U	1725 U	2920 U
FW-RM-19-SS	21000	77000	21000	34000	2500 U	6200	390000 D	1221900	1224250	1221900
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	6600	27000	5200	9000	1100 U	1200	110000	370600	372105	370600
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	150 U	250	170 U	350 U	160 U	180 U	1000	3320	4330	4890
FW-RM-20-SS	3400	9500	3100	11000	2100 U	2600	38000	156200	159150	160000
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	190 U	550	210 U	430 U	200 U	220 U	1300	5540	6600	7090
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	150 U	160 U	170 U	350 U	170 U	180 U	390	1420	2595	3320
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	130 U	130 U	150 U	300 U	140 U	160 U	180 U	300 U	1270 U	2400 U

Sample ID	Dibenzo(a,h) anthracene ( $\mu\text{g}/\text{L}$ )	Fluoranthene ( $\mu\text{g}/\text{L}$ )	Fluorene ( $\mu\text{g}/\text{L}$ )	Indeno(1,2,3-cd) pyrene ( $\mu\text{g}/\text{L}$ )	Naphthalene ( $\mu\text{g}/\text{L}$ )	Phenanthrene ( $\mu\text{g}/\text{L}$ )	Pyrene ( $\mu\text{g}/\text{L}$ )	Total PAHs	Total PAHs <sup>2</sup>	Total PAHs <sup>3</sup>
FW-RM-RB-01	3.1 U	2.1 U	1.9 U	3.4 U	2.6 U	2.1 U	2.4 U	3.4 U j&	19.65 U j&	39.3 U j&
FW-RM-RB-02	3.1 U	2.1 U	1.9 U	3.4 U	2.6 U	2.1 U	2.4 U	3.4 U j&	19.65 U j&	39.3 U j&

**Notes:**

9500 = exceeds PEC

U - The analyte was not detected above the reporting limit.

N - Spiked sample recovery is not within control limits.

& - Laboratory Control Spike recovery is not within control limits.

D - Analyte value from diluted analysis.

j - Data validation qualifer assigned to indicate an estimated value or estimated detection limit.

TEC - Threshold Effect Concentration (MacDonald et al., 2000)

PEC - Probable Effect Concentration (MacDonald et al., 2000)

<sup>a</sup> - TEL from CCME (1999)

<sup>b</sup> - PEL from CCME (1999)

$\mu\text{g}/\text{kg}$  - micrograms per kilogram dry weight

$\mu\text{g}/\text{L}$  - micrograms per liter

<sup>1</sup> Total PAHs - Sum of detects only. When all are non-detect, take highest detection limit.

<sup>2</sup> Total PAHs - Sum is calculated using all values and treats less-than values as 1/2 detection limit.

<sup>3</sup> Total PAHs - Sum is calculated using all values except those with a detection limit >PEC.

dup - Field duplicate. RM-21-CS is a field duplicate of RM-1b-CS, and RM-21-SS is a field duplicate of RM-13-SS.

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	4,4'-DDD ( $\mu\text{g/kg}$ )	4,4'-DDE ( $\mu\text{g/kg}$ )	4,4'-DDT ( $\mu\text{g/kg}$ )	Total DDT <sup>1</sup> ( $\mu\text{g/kg}$ )	Total DDT <sup>2</sup> ( $\mu\text{g/kg}$ )	Aldrin ( $\mu\text{g/kg}$ )	alpha-BHC ( $\mu\text{g/kg}$ )	alpha-Chlordane ( $\mu\text{g/kg}$ )
<b>Consensus-Based TEC</b>	<b>4.88</b>	<b>3.16</b>	<b>4.16</b>	<b>5.28</b>	<b>5.28</b>			
<b>Consensus-Based PEC</b>	<b>28.0</b>	<b>31.3</b>	<b>62.9</b>	<b>572</b>	<b>572</b>			
FW-RM-01-SS	170 *j	85 Pj	78 UX	294 *jPX	255 *jPX	39 UN	39 U	85 JP
FW-RM-01-CS-1-2 (2.1-4.2)	31 J	74 U	33 J	101 J	64 J	37 U	37 U	25 J
FW-RM-01-CS-2-3.9 (4.2-8.2)	67 Uj	67 Uj	67 Uj	101 Uj	0 Uj	33 Uj	33 Uj	330 Uj
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	71 Uj	71 Uj	71 Uj	107 Uj	0 Uj	36 Uj	36 Uj	360 Uj
FW-RM-21-CS-3.6-5.6 (dup)	51 Uj	51 Uj	51 Uj	76.5 Uj	51 Uj	25 Uj	25 Uj	250 Uj
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	39 Uj	39 Uj	39 Uj	58.5 Uj	39 Uj	20 Uj	20 Uj	200 Uj
FW-RM-21-CS-7.0-9.0 (dup)	39 Uj	39 Uj	39 Uj	58.5 Uj	39 Uj	19 Uj	19 Uj	190 Uj
FW-RM-02-SS	160 j	50 JP	27 JP	237 JP	237 JP	29 U	29 U	34 JP
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	2.6 J&*	27 Uj&*	27 Uj&*	30 j&*	57 j&*	14 Uj&*	14 Uj&*	140 Uj&*
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	25 Uj&*	25 Uj&*	25 Uj&*	38 Uj&*	75 Uj&*	12 Uj&*	12 Uj&*	120 Uj&*
FW-RM-03-SS	37 J	14 JP	47 Uj	74.5 JP	98 JP	24 Uj	24 Uj	7 JP
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	25 Uj	25 Uj	25 Uj	37.5 Uj	75 Uj	12 Uj	12 Uj	120 Uj
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	21 U	21 U	21 U	31.5 U	63 U	10 U	10 U	100 U
FW-RM-04-SS	12 J	5 J	33 U	33.5 J	50 J	17 U	17 U	1.2 J
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	3.9 J&*	2.7 JP&*	2.1 J&*	8.7 JP&*	8.7 JP&*	15 Uj&*	15 Uj&*	150 Uj&*
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	22 Uj&*	22 Uj&*	22 Uj&*	33 Uj&*	66 Uj&*	11 Uj&*	11 Uj&*	110 Uj&*
FW-RM-05-SS	790	93 J	330 Uj	1048 J	883 J	170 U	170 U	27 J
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	1400 Uj&*	1400 Uj&*	1400 Uj&*	2100 Uj&*	0 Uj&*	720 Uj&*	720 Uj&*	7200 Uj&*
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	29 Uj&*	29 Uj&*	29 Uj&*	43.5 Uj&*	58 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*
FW-RM-06-SS	49 j	33 JP	47 Uj	106 JP	129 JP	24 Uj	24 Uj	240 UjX
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	31 U	31 U	31 Uj	46.5 Uj	62 Uj	16 U	16 U	160 U
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	24 U	24 U	24 Uj	36 Uj	72 Uj	12 U	12 U	120 U
FW-RM-07-SS	80 j	29 JP	19 J	128 JP	128 JP	23 Uj	23 Uj	230 UjX
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	34 Uj	34 Uj	34 Uj	51 Uj	34 Uj	17 Uj	17 Uj	170 Uj
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	23 Uj	23 Uj	23 Uj	35 Uj	69 Uj	11 Uj	11 Uj	110 Uj
FW-RM-08-SS	59	13 JP	140	212 JP	212 JP	26 U	26 U	5.7 JP
FW-RM-08-CS-1-2.3 (1.2-2.7)	36 U	36 U	36 Uj	54 Uj	36 Uj	18 U	18 U	180 U
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	24 U	24 U	24 Uj	36 Uj	72 Uj	12 U	12 U	120 U

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	4,4'-DDD ( $\mu\text{g/kg}$ )	4,4'-DDE ( $\mu\text{g/kg}$ )	4,4'-DDT ( $\mu\text{g/kg}$ )	Total DDT <sup>1</sup> ( $\mu\text{g/kg}$ )	Total DDT <sup>2</sup> ( $\mu\text{g/kg}$ )	Aldrin ( $\mu\text{g/kg}$ )	alpha-BHC ( $\mu\text{g/kg}$ )	alpha-Chlordane ( $\mu\text{g/kg}$ )
<b>Consensus-Based TEC</b>	<b>4.88</b>	<b>3.16</b>	<b>4.16</b>	<b>5.28</b>	<b>5.28</b>			
<b>Consensus-Based PEC</b>	<b>28.0</b>	<b>31.3</b>	<b>62.9</b>	<b>572</b>	<b>572</b>			
FW-RM-09-SS	90 J	28 JP	30 JP	148 JP	148 JP	37 Uj	37 Uj	19 JP
FW-RM-09-CS-1-3.5 (1.1-4.0)	46 U	46 U	46 Uj	69 Uj	46 Uj	23 U	23 U	230 U
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	32 U	32 U	32 Uj	48 Uj	32 Uj	16 U	16 U	160 U
FW-RM-10-SS	50 J	33 JP	54 U	110 JP	137 JP	27 U	27 U	270 UX
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	35 Uj&*	35 Uj&*	35 Uj&*	53 Uj&*	35 Uj&*	18 Uj&*	18 Uj&*	180 Uj&*
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	24 Uj&*N	24 Uj&*N	24 Uj&*N	36 Uj&*N	72 Uj&*N	12 Uj&*N	12 Uj&*N	120 Uj&*N
FW-RM-11-SS	10 J	11 JP	74 Uj	58 JP	21 JP	37 Uj	37 Uj	370 Uj
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	42 U	42 U	42 Uj	63 Uj	42 Uj	21 U	21 U	210 U
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	28 U	28 U	28 Uj	42 Uj	84 Uj	14 U	14 U	140 U
FW-RM-12-SS	290	70 UX	38 JP	363 JPX	328 JPX	35 U	35 U	120 J
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	75 J&*	360 Uj&*	62 JP&*	317 JP&*	137 JP&*	180 Uj&*	180 Uj&*	1800 Uj&*
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	30 Uj&*	30 Uj&*	30 Uj&*	45 Uj&*	60 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*
FW-RM-13-SS	17 J	56 UX	56 U	73 JX	73 JX	28 UX	28 U	280 U
FW-RM-21-SS (dup)	15 J	10 JP	54 Uj	52 JP	79 JP	27 UjX	27 Uj	270 UjX
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	33 Uj&*	33 Uj&*	33 Uj&*	50 Uj&*	33 Uj&*	16 Uj&*	16 Uj&*	160 Uj&*
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	27 Uj&*	27 Uj&*	27 Uj&*	41 Uj&*	81 Uj&*	14 Uj&*	14 Uj&*	140 Uj&*
FW-RM-14-SS	27 J	65 UjX	65 Uj	92 JX	27 JX	33 UjX	33 Uj	330 Uj
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	49 U	49 U	49 Uj	73.5 Uj	98 Uj	25 U	25 U	250 U
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	35 U	35 U	35 Uj	52.5 Uj	35 Uj	18 U	18 U	180 U
FW-RM-15-SS	44 J	24 JP	19 JP	87 JP	87 JP	30 U	30 U	13 JP
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	31 Uj&*	31 Uj&*	31 Uj&*	47 Uj&*	62 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	27 Uj&*	27 Uj&*	27 Uj&*	41 Uj&*	81 Uj&*	13 Uj&*	13 Uj&*	130 Uj&*
FW-RM-16-SS	29 J	16 JP	14 JP	59 JP	59 JP	31 U	31 U	6.9 JP
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	46 U	46 U	46 Uj	69 Uj	46 Uj	23 U	23 U	230 U
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	33 U	33 U	33 Uj	49.5 Uj	33 Uj	16 U	16 U	160 U
FW-RM-17-SS	2400 U	2400 U	390 J	2790 J	390 J	1200 U	1200 U	12000 U
FW-RM-17-CS-0-1.5 (0.0-2.0)	2300 U	2300 U	240 JP	2540 JP	240 JP	1100 U	1100 U	11000 U
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	27 U	27 U	3.1 JP	30.1 JP	57.1 JP	13 U	13 U	130 U

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	4,4'-DDD (µg/kg)	4,4'-DDE (µg/kg)	4,4'-DDT (µg/kg)	Total DDT <sup>1</sup> (µg/kg)	Total DDT <sup>2</sup> (µg/kg)	Aldrin (µg/kg)	alpha-BHC (µg/kg)	Chlordane (µg/kg)
<b>Consensus-Based TEC</b>	<b>4.88</b>	<b>3.16</b>	<b>4.16</b>	<b>5.28</b>	<b>5.28</b>			
<b>Consensus-Based PEC</b>	<b>28.0</b>	<b>31.3</b>	<b>62.9</b>	<b>572</b>	<b>572</b>			
FW-RM-18-SS	150 j	65 UX	65 UX	215 jX	150 jX	32 UX	32 U	69 J
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	14 JP&*	14 J&*	45 Uj&*	50.5 JP&*	73 JP&*	23 Uj&*	23 Uj&*	36 J&*
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	39 Uj&*	39 Uj&*	39 Uj&*	58.5 Uj&*	39 Uj&*	20 Uj&*	20 Uj&*	200 Uj&*
FW-RM-19-SS	52 UX	52 U	30 J	82 JX	30 JX	17 JP	26 U	67 J
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	7.5 JP&*	44 UjX&*	21 JP&*	51 JP&*X	29 JP&*X	22 Uj&*	1.3 J&*	220 UjX&*
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	34 Uj&*	34 Uj&*	34 Uj&*	51 Uj&*	34 Uj&*	17 Uj&*	17 Uj&*	170 Uj&*
FW-RM-20-SS	14 J	44 U	35 J	71 J	49 J	22 U	22 U	5.3 J
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	42 Uj	42 Uj	42 Uj	63 Uj	42 Uj	21 Uj	21 Uj	210 Uj
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	34 Uj&*	34 Uj&*	34 Uj&*	51 Uj&*	34 Uj&*	17 Uj&*	17 Uj&*	170 Uj&*
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	29 Uj&*	29 Uj&*	29 Uj&*	44 Uj&*	58 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*
Sample ID	4,4'-DDD (µg/L)	4,4'-DDE (µg/L)	4,4'-DDT (µg/L)	Total DDT <sup>1</sup> (µg/L)	Total DDT <sup>2</sup> (µg/L)	Aldrin (µg/L)	alpha-BHC (µg/L)	Chlordane (µg/L)
FW-RM-RB-01	0.3 Uj	0.3 Uj	0.3 Uj	0.45 Uj	0.9 Uj	0.15 Uj	0.15 Uj	1.5 Uj
FW-RM-RB-02	0.3 U	0.3 U	0.3 U	0.45 U	0.9 U	0.15 U	0.15 U	1.5 U

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	gamma-Chlordane ( $\mu\text{g/kg}$ )	Total Chlordane <sup>3</sup> ( $\mu\text{g/kg}$ )	beta-BHC ( $\mu\text{g/kg}$ )	delta-BHC ( $\mu\text{g/kg}$ )	gamma-BHC (Lindane) ( $\mu\text{g/kg}$ )	Dieldrin ( $\mu\text{g/kg}$ )	Endosulfan I ( $\mu\text{g/kg}$ )	Endosulfan II ( $\mu\text{g/kg}$ )
<b>Consensus-Based TEC</b>		<b>3.24</b>			<b>2.37</b>	<b>1.90</b>		
<b>Consensus-Based PEC</b>		<b>17.6</b>			<b>4.99</b>	<b>61.8</b>		
FW-RM-01-SS	100 JP	185 JP	39 U	39 UN	39 UX	32 JP	9.6 JP	78 U
FW-RM-01-CS-1-2 (2.1-4.2)	14 JP	39 JP	37 U	37 U	37 U	74 U	37 UX	74 U
FW-RM-01-CS-2-3.9 (4.2-8.2)	330 Uj	330 Uj	33 Uj	33 Uj	33 Uj	67 Uj	33 Uj	67 Uj
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	360 Uj	360 Uj	36 Uj	36 Uj	36 Uj	71 Uj	36 Uj	71 Uj
FW-RM-21-CS-3.6-5.6 (dup)	250 Uj	250 Uj	25 Uj	25 Uj	25 Uj	51 Uj	25 Uj	51 Uj
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	200 Uj	200 Uj	20 Uj	20 Uj	20 Uj	39 Uj	20 Uj	39 Uj
FW-RM-21-CS-7.0-9.0 (dup)	190 Uj	190 Uj	19 Uj	19 Uj	19 Uj	39 Uj	19 Uj	39 Uj
FW-RM-02-SS	42 JP	76 JP	14 J	29 U	2.4 JP	59 UX	29 U	59 UX
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	1.1 JP&*	1.1 JP&*	14 Uj&*	14 Uj&*	14 Uj&*	27 Uj&*	14 Uj&*	27 Uj&*
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	120 Uj&*	120 Uj&*	12 Uj&*	12 Uj&*	12 Uj&*	25 Uj&*	12 Uj&*	25 Uj&*
FW-RM-03-SS	8.6 JP	15.6 JP	3.9 J	24 Uj	1.2 JP	47 Uj	24 Uj	47 Uj
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	120 Uj	120 Uj	12 Uj	12 Uj	12 Uj	25 Uj	12 Uj	25 Uj
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	100 U	100 U	10 U	10 U	10 U	21 U	10 U	21 U
FW-RM-04-SS	2.1 J	3.3 J	0.99 JP	17 U	17 U	33 U	17 U	33 U
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	150 Uj&*	150 Uj&*	15 Uj&*	15 Uj&*	15 Uj&*	29 Uj&*	15 Uj&*	29 Uj&*
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	110 Uj&*	110 Uj&*	11 Uj&*	11 Uj&*	11 Uj&*	22 Uj&*	11 Uj&*	22 Uj&*
FW-RM-05-SS	71 J	98 J	47 JP	170 U	11 JP	330 U	170 U	330 UX
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	7200 Uj&*	7200 Uj&*	720 Uj&*	720 Uj&*	720 Uj&*	1400 Uj&*	720 Uj&*	1400 Uj&*
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	150 Uj&*	150 Uj&*	15 Uj&*	15 Uj&*	15 Uj&*	29 Uj&*	15 Uj&*	29 Uj&*
FW-RM-06-SS	25 JP	25 JP	5.3 J	24 Uj	24 Uj	47 UjX	24 UjX	47 Uj
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	160 U	160 U	16 U	16 U	16 U	31 U	16 Uj	31 U
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	120 U	120 U	12 U	12 U	12 U	24 U	12 Uj	24 U
FW-RM-07-SS	13 JP	13 JP	5.2 J	23 Uj	23 Uj	6.3 JP	23 UjX	46 Uj
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	170 Uj	170 Uj	17 Uj	17 Uj	17 Uj	34 Uj	17 Uj	34 Uj
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	110 Uj	110 Uj	11 Uj	11 Uj	11 Uj	23 Uj	11 Uj	23 Uj
FW-RM-08-SS	6.9 JP	12.6 JP	4.1 J	26 U	26 U	53 U	26 UX	53 U
FW-RM-08-CS-1-2.3 (1.2-2.7)	180 U	180 U	18 U	18 U	18 U	36 U	18 U	36 U
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	120 U	120 U	12 U	12 U	12 U	24 U	12 U	24 U

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	gamma-Chlordane ( $\mu\text{g/kg}$ )	Total Chlordane <sup>3</sup> ( $\mu\text{g/kg}$ )	beta-BHC ( $\mu\text{g/kg}$ )	delta-BHC ( $\mu\text{g/kg}$ )	gamma-BHC (Lindane) ( $\mu\text{g/kg}$ )	Dieldrin ( $\mu\text{g/kg}$ )	Endosulfan I ( $\mu\text{g/kg}$ )	Endosulfan II ( $\mu\text{g/kg}$ )
<b>Consensus-Based TEC</b>		<b>3.24</b>			<b>2.37</b>		<b>1.90</b>	
<b>Consensus-Based PEC</b>		<b>17.6</b>			<b>4.99</b>		<b>61.8</b>	
FW-RM-09-SS	14 JP	33 JP	14 JP	37 Uj	37 Uj	5.9 JP	6.2 JP	73 Uj
FW-RM-09-CS-1-3.5 (1.1-4.0)	230 U	230 U	23 U	23 U	23 U	46 U	23 U	46 U
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	160 U	160 U	16 U	16 U	16 U	32 U	16 U	32 U
FW-RM-10-SS	15 JP	15 JP	6.2 J	27 U	27 U	12 JP	27 UX	54 U
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	180 Uj&*	180 Uj&*	18 Uj&*	18 Uj&*	18 Uj&*	35 Uj&*	18 Uj&*	35 Uj&*
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	120 Uj&*N	120 Uj&*N	12 Uj&*N	12 Uj&*N	12 Uj&*N	24 Uj&*N	12 Uj&*N	24 Uj&*N
FW-RM-11-SS	370 UjX	370 UjX	37 Uj	37 Uj	37 U	74 U	37 U	74 U
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	210 U	210 U	21 U	21 U	21 U	42 U	21 Uj	42 U
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	140 U	140 U	14 U	14 U	14 U	28 U	14 Uj	28 U
FW-RM-12-SS	130 J	250 J	35 U	35 U	2.8 JP	36 JP	12 J	70 U
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	1800 Uj&*	1800 Uj&*	180 Uj&*	180 Uj&*	180 Uj&*	360 Uj&*	180 Uj&*	360 Uj&*
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	150 Uj&*	150 Uj&*	15 Uj&*	15 Uj&*	15 Uj&*	30 Uj&*	15 Uj&*	30 Uj&*
FW-RM-13-SS	280 UX	280 UX	7.4 J	28 U	28 U	56 U	28 U	56 U
FW-RM-21-SS (dup)	270 UjX	270 UjX	5.5 J	27 Uj	27 Uj	54 Uj	27 Uj	54 Uj
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	160 Uj&*	160 Uj&*	16 Uj&*	16 Uj&*	16 Uj&*	33 Uj&*	16 Uj&*	33 Uj&*
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	140 Uj&*	140 Uj&*	14 Uj&*	14 Uj&*	14 Uj&*	27 Uj&*	14 Uj&*	27 Uj&*
FW-RM-14-SS	330 UjX	330 UjX	6.1 JP	33 Uj	33 Uj	65 Uj	33 Uj	65 Uj
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	250 U	250 U	25 U	25 U	25 U	49 U	25 Uj	49 U
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	180 U	180 U	18 U	18 U	18 U	35 U	18 Uj	35 U
FW-RM-15-SS	18 JP	31 JP	7 J	30 U	30 U	60 UX	30 UX	60 U
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	150 Uj&*	150 Uj&*	15 Uj&*	15 Uj&*	15 Uj&*	31 Uj&*	15 Uj&*	31 Uj&*
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	130 Uj&*	130 Uj&*	13 Uj&*	13 Uj&*	13 Uj&*	27 Uj&*	13 Uj&*	27 Uj&*
FW-RM-16-SS	310 UX	6.9 JP	3.6 J	31 U	31 U	3.2 JP	31 U	61 U
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	230 U	230 U	23 U	23 U	23 U	46 U	23 Uj	46 U
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	160 U	160 U	16 U	16 U	16 U	33 U	16 Uj	33 U
FW-RM-17-SS	95 J	95 J	1200 U	1200 U	1200 U	2400 U	1200 U	2400 U
FW-RM-17-CS-0-1.5 (0.0-2.0)	#### U	11000 U	1100 U	1100 U	1100 U	2300 U	1100 U	2300 U
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	130 U	130 U	13 U	13 U	13 U	27 U	13 U	27 U

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	gamma-Chlordane ( $\mu\text{g/kg}$ )	Total Chlordane <sup>3</sup> ( $\mu\text{g/kg}$ )	beta-BHC ( $\mu\text{g/kg}$ )	delta-BHC ( $\mu\text{g/kg}$ )	gamma-BHC (Lindane) ( $\mu\text{g/kg}$ )	Dieldrin ( $\mu\text{g/kg}$ )	Endosulfan I ( $\mu\text{g/kg}$ )	Endosulfan II ( $\mu\text{g/kg}$ )
<b>Consensus-Based TEC</b>		<b>3.24</b>			<b>2.37</b>	<b>1.90</b>		
<b>Consensus-Based PEC</b>		<b>17.6</b>			<b>4.99</b>	<b>61.8</b>		
FW-RM-18-SS	320 UX	69 J	32 U	32 U	32 U	65 U	32 U	65 U
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	14 JP&*	50 JP&*	23 Uj&*	8.4 J&*	23 Uj&*	45 UjX&*	23 Uj&*	45 J&*
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	200 Uj&*	200 Uj&*	20 Uj&*	20 Uj&*	20 Uj&*	39 Uj&*	20 Uj&*	39 Uj&*
FW-RM-19-SS	260 U	67 J	26 U	23 J	26 U	52 U	32 JP	52 U
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	12 JP&*	12 JP&*	22 Uj&*	22 Uj&*	22 Uj&*	44 Uj&*	22 Uj&*	44 Uj&*
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	170 Uj&*	170 Uj&*	17 Uj&*	17 Uj&*	17 Uj&*	34 Uj&*	17 Uj&*	34 Uj&*
FW-RM-20-SS	220 U	5.3 J	22 U	22 U	22 U	44 U	22 U	44 U
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	210 Uj	210 Uj	21 Uj	21 Uj	21 Uj	42 Uj	21 Uj	42 Uj
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	170 Uj&*	170 Uj&*	17 Uj&*	17 Uj&*	17 Uj&*	34 Uj&*	17 Uj&*	34 Uj&*
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	150 Uj&*	150 Uj&*	15 Uj&*	15 Uj&*	15 Uj&*	29 Uj&*	15 Uj&*	29 Uj&*
Sample ID	gamma-Chlordane ( $\mu\text{g/L}$ )	Total Chlordane <sup>3</sup> ( $\mu\text{g/L}$ )	beta-BHC ( $\mu\text{g/L}$ )	delta-BHC ( $\mu\text{g/L}$ )	gamma-BHC (Lindane) ( $\mu\text{g/L}$ )	Dieldrin ( $\mu\text{g/L}$ )	Endosulfan I ( $\mu\text{g/L}$ )	Endosulfan II ( $\mu\text{g/L}$ )
FW-RM-RB-01	1.5 Uj	1.5 Uj	0.15 Uj	0.15 Uj	0.15 Uj	0.3 Uj	0.15 Uj	0.3 Uj
FW-RM-RB-02	1.5 U	1.5 U	0.15 U	0.15 U	0.15 U	0.3 U	0.15 U	0.3 U

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	Endosulfan sulfate (µg/kg)	Endrin (µg/kg)	Endrin ketone (µg/kg)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	Methoxychlor (µg/kg)	Toxaphene (µg/kg)
<b>Consensus-Based TEC</b>		<b>2.22</b>			<b>2.47</b>		
<b>Consensus-Based PEC</b>		<b>207</b>			<b>16.0</b>		
FW-RM-01-SS	27 JP	78 U	78 U	39 U*	39 UX	390 U	780 U
FW-RM-01-CS-1-2 (2.1-4.2)	27 JP	18 JP	74 UX	37 U	28 JP	52 J	740 U
FW-RM-01-CS-2-3.9 (4.2-8.2)	67 Uj	67 Uj	67 Uj	33 Uj	33 Uj	330 Uj	670 Uj
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	71 Uj	71 Uj	71 Uj	36 Uj	36 Uj	360 Uj	710 Uj
FW-RM-21-CS-3.6-5.6 (dup)	51 Uj	51 Uj	51 Uj	25 Uj	25 Uj	250 Uj	510 Uj
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	39 Uj	39 Uj	39 Uj	20 Uj	20 Uj	200 Uj	390 Uj
FW-RM-21-CS-7.0-9.0 (dup)	39 Uj	39 Uj	39 Uj	19 Uj	19 Uj	190 Uj	390 Uj
FW-RM-02-SS	23 JP	59 U	59 U	29 U	29 UX	290 U	590 U
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	27 Uj&*	27 Uj&*	27 Uj&*	14 Uj&*	14 Uj&*	140 Uj&*	270 U&*
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	25 Uj&*	25 Uj&*	25 Uj&*	12 Uj&*	12 Uj&*	120 Uj&*	250 U&*
FW-RM-03-SS	5.8 JP	47 UjX	47 Uj	24 Uj	24 UjX	240 Uj	470 Uj
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	25 Uj	25 Uj	25 Uj	12 Uj	12 Uj	120 Uj	250 Uj
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	21 U	21 U	21 U	10 U	10 U	100 U	210 U
FW-RM-04-SS	33 U	33 U	33 U	17 U	17 UX	170 U	330 U
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	29 Uj&*	29 Uj&*	29 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*	290 U&*
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	22 Uj&*	22 Uj&*	22 Uj&*	11 Uj&*	11 Uj&*	110 Uj&*	220 U&*
FW-RM-05-SS	330 U	330 U	110 J	170 U	170 UX	1700 U	3300 U
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	1400 Uj&*	1400 Uj&*	1400 Uj&*	720 Uj&*	720 Uj&*	7200 Uj&*	14000 U&*
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	29 Uj&*	29 Uj&*	29 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*	290 U&*
FW-RM-06-SS	16 J	47 Uj	47 Uj	24 Uj	24 UjX	23 J	470 Uj
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	31 U	31 U	31 U	16 U	16 U	160 U	310 U
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	24 U	24 U	24 U	12 U	12 U	120 U	240 U
FW-RM-07-SS	18 JP	46 Uj	46 Uj	23 Uj	23 UjX	230 Uj	460 Uj
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	34 Uj	34 Uj	34 Uj	17 Uj	17 Uj	170 Uj	340 Uj
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	23 Uj	23 Uj	23 Uj	11 Uj	11 Uj	110 Uj	230 Uj
FW-RM-08-SS	18 JP	53 UX	53 U	26 U	26 UX	29 JP	530 U
FW-RM-08-CS-1-2.3 (1.2-2.7)	36 U	36 U	36 U	18 U	18 U	180 U	360 U
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	24 U	24 U	24 U	12 U	12 U	120 U	240 U

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	Endosulfan sulfate ( $\mu\text{g/kg}$ )	Endrin ( $\mu\text{g/kg}$ )	Endrin ketone ( $\mu\text{g/kg}$ )	Heptachlor ( $\mu\text{g/kg}$ )	Heptachlor epoxide ( $\mu\text{g/kg}$ )	Methoxychlor ( $\mu\text{g/kg}$ )	Toxaphene ( $\mu\text{g/kg}$ )
<b>Consensus-Based TEC</b>		<b>2.22</b>			<b>2.47</b>		
<b>Consensus-Based PEC</b>		<b>207</b>			<b>16.0</b>		
FW-RM-09-SS	20 JP	73 UjX	73 Uj	37 Uj	37 UjX	31 J	730 Uj
FW-RM-09-CS-1-3.5 (1.1-4.0)	46 U	46 U	46 U	23 U	23 U	230 U	460 U
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	32 U	32 U	32 U	16 U	16 U	160 U	320 U
FW-RM-10-SS	6.2 JP	54 U	54 U	27 U	27 UX	270 U	540 U
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	35 U&*	35 Uj&*	35 Uj&*	18 Uj&*	18 Uj&*	180 Uj&*	350 U&*
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	24 U&*N	24 Uj&*N	24 Uj&*N	12 Uj&*N	12 Uj&*N	120 Uj&*N	240 U&*N
FW-RM-11-SS	5 J	74 U	74 U	37 U	37 U	370 U	740 Uj
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	42 U	42 U	42 U	21 U	21 U	210 U	420 U
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	28 U	28 U	28 U	14 U	14 U	140 U	280 U
FW-RM-12-SS	34 JP	70 U	70 U	35 UX	35 UX	350 U	700 U
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	24 JP&*	360 Uj&*	360 Uj&*	180 Uj&*	180 Uj&*	1800 Uj&*	3600 U&*
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	30 Uj&*	30 Uj&*	30 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*	300 U&*
FW-RM-13-SS	8.4 J	56 U	6.9 J	28 U	28 U	280 U	560 U
FW-RM-21-SS (dup)	5.7 J	54 Uj	6.8 JP	27 Uj	27 Uj	270 Uj	540 Uj
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	33 Uj&*	33 Uj&*	33 Uj&*	16 Uj&*	16 Uj&*	160 Uj&*	330 U&*
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	27 Uj&*	27 Uj&*	27 Uj&*	14 Uj&*	14 Uj&*	140 Uj&*	270 U&*
FW-RM-14-SS	16 J	65 Uj	65 Uj	33 Uj	33 Uj	330 Uj	650 Uj
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	49 U	49 U	49 U	25 U	25 U	250 U	490 U
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	35 U	35 U	35 U	18 U	18 U	180 U	350 U
FW-RM-15-SS	3.8 JP	60 U	60 U	30 U	30 UX	300 U	600 U
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	31 Uj&*	31 Uj&*	31 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*	310 U&*
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	27 Uj&*	27 Uj&*	27 Uj&*	13 Uj&*	13 Uj&*	130 Uj&*	270 U&*
FW-RM-16-SS	3.7 JP	61 U	61 U	31 U	31 UX	310 U	610 U
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	46 U	46 U	46 U	23 U	23 U	230 U	460 U
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	33 U	33 U	33 U	16 U	16 U	160 U	330 U
FW-RM-17-SS	2400 U	2400 U	2400 U	1200 U	1200 U	1000 JP	24000 U
FW-RM-17-CS-0-1.5 (0.0-2.0)	2300 U	2300 U	2300 U	1100 U	1100 U	11000 UX	23000 U
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	27 U	27 U	27 U	13 U	13 U	130 U	270 U

**Table A-5. Roxana Marsh Pesticide Results**

Sample ID (in situ depth)	Endosulfan sulfate ( $\mu\text{g}/\text{kg}$ )	Endrin ( $\mu\text{g}/\text{kg}$ )	Endrin ketone ( $\mu\text{g}/\text{kg}$ )	Heptachlor ( $\mu\text{g}/\text{kg}$ )	Heptachlor epoxide ( $\mu\text{g}/\text{kg}$ )	Methoxychlor ( $\mu\text{g}/\text{kg}$ )	Toxaphene ( $\mu\text{g}/\text{kg}$ )
<b>Consensus-Based TEC</b>		<b>2.22</b>			<b>2.47</b>		
<b>Consensus-Based PEC</b>		<b>207</b>			<b>16.0</b>		
FW-RM-18-SS	41 J	65 U	14 JP	32 U	32 U	320 U	650 U
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	31 JP&*	45 Uj&*	15 J&*	23 Uj&*	23 Uj&*	230 UjX&*	450 U&*
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	39 Uj&*	39 Uj&*	39 Uj&*	20 Uj&*	20 Uj&*	200 Uj&*	390 U&*
FW-RM-19-SS	52 U	92 j	49 J	26 U	15 JP	260 UX	520 U
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	44 Uj&*	9.1 JP&*	12 JP&*	22 Uj&*	3.3 JP&*	220 Uj&*	440 U&*
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	34 Uj&*	34 Uj&*	34 Uj&*	17 Uj&*	17 Uj&*	170 Uj&*	340 U&*
FW-RM-20-SS	44 U	44 U	44 UX	22 U	6.7 J	220 U	440 U
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	42 Uj	42 Uj	42 Uj	21 Uj	21 Uj	210 Uj	420 Uj
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	34 Uj&*	34 Uj&*	34 Uj&*	17 Uj&*	17 Uj&*	170 Uj&*	340 U&*
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	29 Uj&*	29 Uj&*	29 Uj&*	15 Uj&*	15 Uj&*	150 Uj&*	290 U&*
Sample ID	Endosulfan sulfate ( $\mu\text{g}/\text{L}$ )	Endrin ( $\mu\text{g}/\text{L}$ )	Endrin ketone ( $\mu\text{g}/\text{L}$ )	Heptachlor ( $\mu\text{g}/\text{L}$ )	Heptachlor epoxide ( $\mu\text{g}/\text{L}$ )	Methoxychlor ( $\mu\text{g}/\text{L}$ )	Toxaphene ( $\mu\text{g}/\text{L}$ )
FW-RM-RB-01	0.3 Uj	0.3 Uj	0.3 Uj	0.15 Uj	0.15 Uj	1.5 Uj	3 Uj
FW-RM-RB-02	0.3 U	0.3 U	0.3 U	0.15 U	0.15 U	1.5 U	3 U

**Notes:**

600 - Exceeds PEC

U - The analyte was not detected above the reporting limit.

X - See sample narrative.

& - Laboratory Control Spike recovery is not within control limits.

\* - Laboratory Duplicate analyses are not within control limits.

J - Qualitative evidence of analyte present: concentration detected is greater than the method detection limit but less than

P - The relative percent difference between the two columns for detected concentrations was greater than 40%.

j - Data validation qualifer assigned to indicate an estimated value or estimated detection limit.

TEC - Threshold Effect Concentration (MacDonald et al., 2000)

PEC - Probable Effect Concentration (MacDonald et al., 2000)

$\mu\text{g}/\text{kg}$  - micrograms per kilogram dry weight

$\mu\text{g}/\text{L}$  - micrograms per liter

dup - Field duplicate. RM-21-CS is a field duplicate of RM-1b-CS, and RM-21-SS is a field duplicate of RM-13-SS.

<sup>1</sup> Total DDT - Sum calculated using all values and treats non-detect values as 1/2 the detection limit

<sup>2</sup> Total DDT - Sum calculated using all values except those with a detection limit >PEC.

<sup>3</sup> Total Chlordane - Sum of detects only. When all are non-detect, take highest detection limit.

**Table A-6. Roxana Marsh PCB Results**

Sample ID (in situ depth)	Aroclor ( $\mu\text{g/Kg}$ )							Total PCBs <sup>1</sup> ( $\mu\text{g/Kg}$ )
	1016	1221	1232	1242	1248	1254	1260	
Consensus-Based TEC								59.8
Consensus-Based PEC								676
FW-RM-01-SS	1900 U	1900 U	1900 U	1900 U	6900	3100 J	1600 J	11600 J
FW-RM-01-CS-1-2 (2.1-4.2)	370 Uj	370 Uj	370 Uj	370 Uj	910 j	810 j	250 J	1970 j
FW-RM-01-CS-2-3.9 (4.2-8.2)	330 Uj	330 Uj	330 Uj	330 Uj	250 Uj	670 Uj	670 Uj	670 Uj
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	360 U	360 U	360 U	360 U	270 U	710 U	710 U	710 U
FW-RM-21-CS-3.6-5.6 (dup)	250 U	250 U	250 U	250 U	190 U	510 U	510 U	510 U
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	200 U	200 U	200 U	200 U	150 U	390 U	390 U	390 U
FW-RM-21-CS-7.0-9.0 (dup)	190 U	190 U	190 U	190 U	140 U	390 U	390 U	390 U
FW-RM-02-SS	1200 U	1200 U	1200 U	1200 U	1900	2200 J	980 J	5080 J
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	140 Uj	140 Uj	140 Uj	140 U	100 U	270 U	270 U	270 U
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	120 Uj	120 Uj	120 Uj	120 U	94 U	250 U	250 U	250 U
FW-RM-03-SS	240 U	240 U	240 U	240 U	810	810	380 J	2000 J
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	120 Uj	120 Uj	120 Uj	120 Uj	93 Uj	250 Uj	250 Uj	250 Uj
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	100 Uj	100 Uj	100 Uj	100 Uj	78 Uj	210 Uj	210 Uj	210 Uj
FW-RM-04-SS	170 U	170 U	170 U	170 U	120 U	330 U	330 U	330 U
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	150 U	150 U	150 U	150 U	110 U	290 U	290 U	290 U
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	110 U	110 U	110 U	110 U	82 U	220 U	220 U	220 U
FW-RM-05-SS	1700 U	1700 U	1700 U	1700 U	1800	4200	1900 J	7900 J
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	140 Uj	140 Uj	140 Uj	140 U	110 U	290 U	290 U	290 U
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	150 U	150 U	150 U	150 U	110 U	290 U	290 U	290 U
FW-RM-06-SS	240 U	240 U	240 U	240 U	840	790	380 J	2010 J
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	160 U	160 U	160 U	160 U	120 U	310 U	310 U	310 U
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	120 U	120 U	120 U	120 U	89 U	240 U	240 U	240 U
FW-RM-07-SS	920 U	920 U	920 U	920 U	1600	1200 J	520 J	3320 J
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	170 U	170 U	170 U	170 U	130 U	340 U	340 U	340 U
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	110 U	110 U	110 U	110 U	86 U	230 U	230 U	230 U
FW-RM-08-SS	260 U	260 U	260 U	260 U	480	530	260 J	1270 J
FW-RM-08-CS-1-2.3 (1.2-2.7)	180 U	180 U	180 U	180 U	130 U	360 U	360 U	360 U
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	120 U	120 U	120 U	120 U	90 U	240 U	240 U	240 U

**Table A-6. Roxana Marsh PCB Results**

Sample ID (in situ depth)	Aroclor (µg/Kg)						Total PCBs <sup>1</sup> (µg/Kg)
	1016	1221	1232	1242	1248	1254	
<b>Consensus-Based TEC</b>							<b>59.8</b>
<b>Consensus-Based PEC</b>							<b>676</b>
FW-RM-09-SS	370 U	370 U	370 U	370 U	1000	1400	960
FW-RM-09-CS-1-3.5 (1.1-4.0)	230 U	230 U	230 U	230 U	170 U	460 U	460 U
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	160 U	160 U	160 U	160 U	120 U	320 U	320 U
FW-RM-10-SS	270 U	270 U	270 U	270 U	1300	900	490 J
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	180 U	180 U	180 U	180 U	130 U	350 U	350 U
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	120 U	120 U	120 U	120 U	90 U	240 U	240 U
FW-RM-11-SS	370 Uj	370 Uj	370 Uj	370 Uj	790 J	590 J	280 J
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	210 U	210 U	210 U	210 U	160 U	130 U	420 U
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	140 U	140 U	140 U	140 U	100 U	280 U	280 U
FW-RM-12-SS	1700 U	1700 U	1700 U	1700 U	2500 J	3200 J	3500 U
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	180 U	180 U	180 U	180 U	130 U	360 U	360 U
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	150 U	150 U	150 U	150 U	110 U	300 U	300 U
FW-RM-13-SS	280 U	280 U	280 U	280 U	1100	1100	590
FW-RM-21-SS (dup)	270 Uj	270 Uj	270 Uj	270 Uj	1000 j	940 j	540 J
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	160 U	160 U	160 U	160 U	120 U	330 U	330 U
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	140 U	140 U	140 U	140 U	100 U	270 U	270 U
FW-RM-14-SS	330 Uj	330 Uj	330 Uj	330 Uj	1800 j	1700 j	950 j
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	250 U	250 U	250 U	250 U	180 U	490 U	490 U
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	180 U	180 U	180 U	180 U	130 U	350 U	350 U
FW-RM-15-SS	300 U	300 U	300 U	300 U	1100	1000	550 J
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	150 U	150 U	150 U	150 U	110 U	310 U	310 U
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	130 U	130 U	130 U	130 U	100 U	270 U	270 U
FW-RM-16-SS	310 U	310 U	310 U	310 U	850	570 J	280 J
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	230 U	230 U	230 U	230 U	170 U	460 U	460 U
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	160 U	160 U	160 U	160 U	120 U	330 U	330 U
FW-RM-17-SS	240 U	240 U	240 U	240 U	1100	1300	690
FW-RM-17-CS-0-1.5 (0.0-2.0)	4600 U	4600 U	4600 U	4600 U	2200 J	3100 J	1100 J
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	130 Uj	130 Uj	130 Uj	130 Uj	54 J	270 Uj	270 Uj
							54 J

**Table A-6. Roxana Marsh PCB Results**

Sample ID (in situ depth)	Aroclor (µg/Kg)							Total PCBs <sup>1</sup> (µg/Kg)
	1016	1221	1232	1242	1248	1254	1260	
<b>Consensus-Based TEC</b>								<b>59.8</b>
<b>Consensus-Based PEC</b>								<b>676</b>
FW-RM-18-SS	6500 Uj	6500 Uj	6500 Uj	6500 Uj	2900 J	2700 J	13000 Uj	5600 J
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	230 Uj	230 Uj	230 Uj	230 U	170 U	450 U	450 U	450 U
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	200 Uj	200 Uj	200 Uj	200 U	150 U	390 U	390 U	390 U
FW-RM-19-SS	5200 Uj	5200 Uj	5200 Uj	5200 Uj	2800 J	13000 j	2100 J	17900 j
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	220 Uj	220 Uj	220 Uj	220 U	160 U	440 U	440 U	440 U
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	170 Uj	170 Uj	170 Uj	170 U	130 U	340 U	340 U	340 U
FW-RM-20-SS	220 Uj	220 Uj	220 Uj	220 Uj	210 j	270 J	120 J	600 j
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	210 U	210 U	210 U	210 U	160 U	420 U	420 U	420 U
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	170 U	170 U	170 U	170 U	130 U	340 U	340 U	340 U
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	150 U	150 U	150 U	150 U	110 U	290 U	290 U	290 U
Aroclor (µg/L)								
Sample ID	1016	1221	1232	1242	1248	1254	1260	Total PCBs <sup>1</sup> (µg/L)
FW-RM-RB-01	0.93 Uj	0.93 Uj	1.5 Uj	0.93 Uj	0.93 Uj	0.93 Uj	0.93 Uj	1.5 Uj
FW-RM-RB-02	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U

**Notes:**

700 - exceeds PEC

U - The analyte was not detected above the reporting limit.

J - Qualitative evidence of analyte present: concentration detected is greater than the method detection limit but less than the reporting limit. In some cases, a data validation qualifier was assigned (due to a QC outlier) to indicate an estimated value.

j - Data validation qualifer assigned to indicate an estimated value or estimated detection limit.

<sup>1</sup> Total PCBs - Sum of detects only. When all are non-detect, take highest detection limit.

TEC - Threshold Effect Concentration (MacDonald et al., 2000)

PEC - Probable Effect Concentration (MacDonald et al., 2000)

µg/kg - micrograms per kilogram dry weight

µg/L - micrograms per liter

dup - Field duplicate. RM-21-CS is a field duplicate of RM-1b-CS, and RM-21-SS is a field duplicate of RM-13-SS.

**Table A-7. Roxana Marsh Grain Size Results**

Sample ID (in situ depth)	Percent Retained					Percent Finer (Sieve Number)								
	% +3 inches	% Gravel	% Sand	% Silt	% Clay	0.25 inches	#4	#10	#20	#40	#60	#100	#140	#200
FW-RM-01-SS	0.0	0.0	21.0	64.1	14.9	100.0	100.0	99.7	98.0	93.7	89.5	84.7	81.1	79.0
FW-RM-01-CS-1-2 (2.1-4.2)	0.0	0.0	10.7	67.4	21.9	100.0	100.0	100.0	99.5	98.5	96.8	94.2	91.0	89.3
FW-RM-01-CS-2-3.9 (4.2-8.2)	0.0	0.0	23.4	65.0	11.6	100.0	100.0	97.9	96.0	92.2	86.9	81.8	78.4	76.6
FW-RM-01b-CS-3.6-5.6 (5.5-8.6)	0.0	0.0	12.1	70.4	17.5	100.0	100.0	99.9	98.8	96.7	94.1	91.3	89.1	87.9
FW-RM-21-CS-3.6-5.6 (dup)	0.0	0.0	13.0	70.7	16.3	100.0	100.0	99.8	98.9	97.3	94.6	91.4	88.7	87.0
FW-RM-01b-CS-7.0-9.0 (10.7-13.8)	0.0	0.0	20.0	65.3	14.7	100.0	100.0	99.9	99.8	99.3	97.9	94.1	84.5	80.0
FW-RM-21-CS-7.0-9.0 (dup)	0.0	0.0	10.9	78.2	10.9	100.0	100.0	100.0	99.8	99.3	98.2	96.0	91.3	89.1
FW-RM-02-SS	0.0	0.0	29.7	58.0	12.3	100.0	100.0	99.1	96.3	90.7	84.8	78.9	73.4	70.3
FW-RM-02-CS-0.8-2.7 (1.0-3.5)	0.0	0.0	28.9	43.3	27.8	100.0	100.0	100.0	99.9	99.5	98.4	93.2	75.4	71.1
FW-RM-02-CS-2.7-5.2 (3.5-6.7)	0.0	0.0	73.0	17.6	9.4	100.0	100.0	100.0	100.0	99.9	99.5	74.9	32.0	27.0
FW-RM-03-SS	0.0	0.0	19.3	63.7	17.0	100.0	100.0	99.9	98.9	97.6	95.2	90.9	84.4	80.7
FW-RM-03-CS-0.8-2.3 (1.2-3.4)	0.0	0.0	83.5	11.1	5.4	100.0	100.0	100.0	99.9	99.7	99.1	60.3	21.6	16.5
FW-RM-03-CS-2.3-4.8 (3.4-7.1)	0.0	0.0	30.5	49.2	20.3	100.0	100.0	99.9	99.7	99.1	97.5	92.7	74.4	69.5
FW-RM-04-SS	0.0	0.0	72.3	21.4	6.3	100.0	100.0	99.9	99.0	97.1	84.6	40.4	28.0	27.7
FW-RM-04-CS-0.5-2.7 (0.6-3.0)	0.0	0.0	26.2	57.1	16.7	100.0	100.0	99.6	98.9	98.2	96.7	88.2	76.2	73.8
FW-RM-04-CS-2.7-4.8 (3.0-5.4)	0.0	0.1	88.7	6.9	4.3	100.0	99.9	99.9	99.8	99.7	99.2	64.6	17.1	11.2
FW-RM-05-SS	0.0	0.0	19.4	71.8	8.8	100.0	100.0	99.5	97.1	93.1	89.2	85.4	82.6	80.6
FW-RM-05-CS-0.7-3.3 (0.75-3.6)	0.0	0.0	26.4	60.7	12.9	100.0	100.0	99.2	98.4	97.1	95.3	89.2	75.8	73.6
FW-RM-05-CS-3.3-5.9 (3.6-6.4)	0.0	0.0	75.9	17.0	7.1	100.0	100.0	100.0	99.9	99.8	98.9	50.1	26.6	24.1
FW-RM-06-SS	0.0	0.0	26.3	61.7	12.0	100.0	100.0	100.0	99.7	98.0	92.8	85.2	77.7	73.7
FW-RM-06-CS-0.7-2.3 (1.0-3.3)	0.0	0.0	20.7	60.5	18.8	100.0	100.0	99.4	98.7	97.5	95.9	91.9	81.9	79.3
FW-RM-06-CS-2.8-4.7 (4.0-6.7)	0.0	0.1	89.3	7.5	3.1	100.0	99.9	99.9	99.9	99.8	99.5	58.7	15.6	10.6
FW-RM-07-SS	0.0	0.0	28.5	52.9	18.6	100.0	100.0	100.0	99.7	97.9	93.0	84.8	76.1	71.5
FW-RM-07-CS-0.5-2.6 (0.6-3.1)	0.0	0.0	23.9	61.5	14.6	100.0	100.0	99.9	99.1	97.8	94.2	87.5	78.4	76.1
FW-RM-07-CS-2.6-5.4 (3.1-5.4)	0.0	0.0	64.6	29.5	5.9	100.0	100.0	99.9	99.6	99.2	98.4	55.7	39.2	35.4
FW-RM-08-SS	0.0	0.0	24.7	60.1	15.2	100.0	100.0	99.9	99.3	97.0	92.3	86.0	78.6	75.3
FW-RM-08-CS-1-2.3 (1.2-2.7)	0.0	0.0	34.9	50.8	14.3	100.0	100.0	100.0	99.7	98.8	97.0	90.7	69.5	65.1
FW-RM-08-CS-2.3-4.4 (2.7-5.1)	0.0	0.0	81.2	12.7	6.1	100.0	100.0	100.0	99.8	99.5	98.6	53.7	23.2	18.8
FW-RM-08-CS-4.4-7.7 (5.1-9.0)	0.0	0.0	75.7	18.5	5.8	100.0	100.0	99.9	99.8	99.5	98.8	60.7	29.2	24.3
FW-RM-09-SS	0.0	0.0	22.1	65.9	12.0	100.0	100.0	99.8	98.9	96.3	92.6	87.1	81.0	77.9
FW-RM-09-CS-1-3.5 (1.1-4.0)	0.0	0.0	23.9	61.2	14.9	100.0	100.0	98.9	97.1	93.4	88.8	84.0	77.7	76.1
FW-RM-09-CS-3.5-4.9 (4.0-5.6)	0.0	0.0	52.3	41.1	6.6	100.0	100.0	99.6	98.7	97.4	95.9	86.4	55.1	47.7
FW-RM-10-SS	0.0	0.0	15.3	73.4	11.3	100.0	100.0	100.0	99.7	98.3	95.2	91.7	87.6	84.7
FW-RM-10-CS-0.7-1.7 (1.0-2.5)	0.0	0.0	38.1	52.3	9.6	100.0	100.0	99.9	99.4	98.6	96.5	90.9	67.9	61.9
FW-RM-10-CS-1.7-4.0 (2.5-5.9)	0.0	0.0	71.7	20.2	8.1	100.0	100.0	100.0	99.8	99.4	70.9	34.0	28.3	

**Table A-7. Roxana Marsh Grain Size Results**

Sample ID (in situ depth)	Percent Retained					Percent Finer (Sieve Number)								
	% +3 inches	% Gravel	% Sand	% Silt	% Clay	0.25 inches	#4	#10	#20	#40	#60	#100	#140	#200
FW-RM-11-SS	0.0	0.0	9.1	69.5	21.4	100.0	100.0	99.9	99.7	99.1	97.6	95.1	92.3	90.9
FW-RM-11-CS-0.7-2.4 (0.9-3.2)	0.0	0.0	30.1	56.0	13.9	100.0	100.0	94.5	89.4	85.5	81.5	77.3	71.9	69.9
FW-RM-11-CS-2.4-4.2 (3.2-5.6)	0.0	0.0	46.1	41.4	12.5	100.0	100.0	100.0	100.0	99.8	99.5	94.3	61.5	53.9
FW-RM-12-SS	0.0	0.2	40.2	52.1	7.5	100.0	99.8	97.9	92.1	82.9	75.0	67.9	62.7	59.6
FW-RM-12-CS-1.1-1.9 (1.2-2.1)	0.0	0.2	22.1	70.3	7.4	100.0	99.8	98.2	95.0	90.8	86.8	82.5	79.4	77.7
FW-RM-12-CS-2.3-5.3 (2.5-5.9)	0.0	0.0	30.2	55.6	14.2	100.0	100.0	99.6	99.1	98.4	97.5	92.1	73.5	69.8
FW-RM-13-SS	0.0	0.0	23.0	65.8	11.2	100.0	100.0	99.7	98.7	95.6	90.8	85.1	80.0	77.0
FW-RM-21-SS (dup)	0.0	0.0	29.8	58.7	11.5	100.0	100.0	99.7	98.8	95.7	89.6	81.9	74.8	70.2
FW-RM-13-CS-1.0-3.1 (1.1-3.5)	0.0	0.0	16.4	69.5	14.1	100.0	100.0	100.0	99.6	98.4	95.3	91.1	86.0	83.6
FW-RM-13-CS-3.1-6.0 (3.5-6.7)	0.0	0.0	37.6	50.8	11.6	100.0	100.0	100.0	99.9	99.4	98.4	91.3	67.9	62.4
FW-RM-14-SS	0.0	0.0	22.6	60.6	16.8	100.0	100.0	99.8	99.2	97.2	92.8	86.2	80.7	77.4
FW-RM-14-CS-0.7-2.0 (0.9-2.6)	0.0	0.0	21.5	67.7	10.8	100.0	100.0	98.1	95.9	93.7	91.2	87.4	82.0	78.5
FW-RM-14-CS-2.0-3.8 (2.6-5.0)	0.0	0.0	31.8	55.7	12.5	100.0	100.0	99.6	98.5	96.9	94.7	91.3	73.8	68.2
FW-RM-15-SS	0.0	0.0	21.2	68.3	10.5	100.0	100.0	99.5	98.2	95.0	91.0	86.2	81.7	78.8
FW-RM-15-CS-1.2-3.0 (1.5-3.8)	0.0	0.1	18.7	61.0	20.2	100.0	99.9	99.8	99.6	98.8	97.1	93.6	84.5	81.2
FW-RM-15-CS-3.0-4.6 (3.8-5.9)	0.0	0.0	60.3	30.2	9.5	100.0	100.0	99.9	99.6	99.1	97.9	67.1	43.5	39.7
FW-RM-16-SS	0.0	0.0	43.8	43.8	12.4	100.0	100.0	99.8	98.3	92.9	84.2	73.0	62.2	56.2
FW-RM-16-CS-0.7-2.0 (1.0-2.9)	0.0	0.0	17.7	70.4	11.9	100.0	100.0	99.1	96.9	93.4	89.8	86.0	82.4	82.3
FW-RM-16-CS-2.0-3.5 (2.9-5.0)	0.0	0.0	26.9	56.3	16.8	100.0	100.0	100.0	99.8	99.4	98.6	95.7	79.1	73.1
FW-RM-17-SS	0.0	0.1	31.6	61.7	6.6	100.0	99.9	99.3	97.5	92.9	87.1	79.7	72.8	68.3
FW-RM-17-CS-0-1.5 (0.0-2.0)	0.0	0.3	32.6	58.0	9.1	100.0	99.7	99.1	97.7	95.6	93.1	86.9	71.4	67.1
FW-RM-17-CS-1.5-3.5 (2.0-4.7)	0.0	0.0	64.8	27.6	7.6	100.0	100.0	100.0	99.9	99.7	98.7	76.4	41.1	35.2
FW-RM-18-SS	0.0	0.1	21.1	65.6	13.2	100.0	99.9	98.2	94.2	89.3	85.6	82.1	80.1	78.8
FW-RM-18-CS-0.7-2.3 (0.8-2.6)	0.0	0.0	3.8	77.1	19.1	100.0	100.0	99.9	99.7	99.4	98.9	97.9	96.7	96.2
FW-RM-18-CS-2.3-4.3 (2.6-4.8)	0.0	0.0	10.6	73.6	15.8	100.0	100.0	100.0	99.8	99.3	98.6	96.9	91.4	89.4
FW-RM-19-SS	0.0	0.0	14.3	75.1	10.6	100.0	100.0	99.9	98.8	96.4	93.9	90.6	87.5	85.7
FW-RM-19-CS-0.7-2.0 (1.1-3.0)	0.0	0.0	15.1	68.7	16.2	100.0	100.0	99.7	98.7	96.8	94.2	91.2	87.1	84.9
FW-RM-19-CS-2.0-4.0 (3.0-6.0)	0.0	0.2	26.2	60.5	13.1	100.0	99.8	99.8	99.6	98.7	96.9	92.4	78.8	73.6
FW-RM-20-SS	0.0	0.0	8.1	68.2	23.7	100.0	100.0	99.9	99.5	98.8	97.7	95.8	93.2	91.9
FW-RM-20-CS-0.8-2.4 (1.0-3.1)	0.0	0.0	15.7	66.5	17.8	100.0	100.0	99.9	99.6	98.6	96.3	92.5	86.9	84.3
FW-RM-20-CS-2.4-4.2 (3.1-5.4)	0.0	0.0	35.8	52.1	12.1	100.0	100.0	99.9	99.7	98.8	96.8	90.8	69.4	64.2
FW-RM-20-CS-4.2-6.0 (5.4-7.7)	0.0	0.0	54.9	32.8	12.3	100.0	100.0	100.0	99.9	99.5	98.8	81.0	49.9	45.1

dup - Field duplicate. RM-21-CS is a field duplicate of RM-1b-CS, and RM-21-SS is a field duplicate of RM-13-SS.